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# COUNTERING THE SCROOGE IN EACH OF US ON THE MARKETING OF COOPERATIVE BEHAVIOR

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tot het behalen van de graad  
van Doctor in de Toegepaste  
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door

**Barbara BRIERS**

## COMMITTEE

**Advisors:** Prof. Dr. Luk Warlop  
Prof. Dr. Mario Pandelaere

Prof. Dr. Marnik Dekimpe  
Prof. Dr. Siegfried Dewitte  
Prof. Dr. John Pracejus  
Prof. Dr. Dirk Smeesters

Daar de proefschriften in de reeks van de Faculteit Economische en Toegepaste Economische Wetenschappen het persoonlijke werk zijn van hun auteurs, zijn alleen deze laatsten daarvoor verantwoordelijk

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# INTRODUCTION

According to the 2004 Revision of the United Nations (2005) the population at the global level continues to increase. While the size of the population in more developed regions is hardly changing, virtually all population growth is occurring in the less developed regions. Rapid population growth characterizes in particular the group of 50 least developed countries. If the global human population continues to expand in the same tempo (i.e. doubled in 39 years time), there will simply not be enough natural resources on our planet (Schmuck & Schultz, 2002). Moreover, the lifestyles of many people in almost all countries are not sustainable. Overconsumption in the Northern hemisphere of our planet cannot be continued indefinitely. If all people were to adopt the lifestyle of the most industrialized countries, we would need several planets to satisfy these needs (Gardner & Sampat, 1999). For this reason, taking the steps necessary to move toward sustainable development is not one option among many. It is the only option (Schmuck & Schultz, 2002). Sustainability refers to uses of natural resources in such a way that the earth can continue to meet the needs of all people, all life, and future generations.

In the achievement of a sustainable future, fostering 'social' participation will be society's major concern. Like in the profit sector, in the non-profit (or governmental) sector marketing can be an effective tool in getting people to 'cooperate'. Besides education and law, marketing indeed can be a strategic tool to manage cooperative behavior (Rotschild, 1999). Marketing attempts to manage behavior by offering reinforcing incentives and/or consequences that invite voluntary cooperation (Rotschild, 1999). Contrary to marketing, law involves the use of coercion to achieve cooperation in a non-voluntary manner or to threaten with punishment for non-compliance (e.g., penalties for littering); whereas education refers to messages that attempt to inform and/or persuade targets to cooperate voluntarily, but do not provide immediate reward or punishment.

Only providing information and convincing arguments, which make the consumer think and evaluate his options (i.e. education), can definitely change opinions (Andreasen, 1995; Fishbein & Ajzen, 1975). This theoretical orientation is at the base of traditional awareness raising or sensibilization campaigns. For highly involving decisions (e.g., a family

considering a switch to alternative energy for heating their house), this approach may be the most suitable (Osterhuis, 1997). Unfortunately, a variety of studies have established that enhancing knowledge and creating supportive attitudes by means of information-intensive campaigns often has little or no impact upon behavior (McKenzie-Mohr, 2000). We know that human beings like to reason, but are not always rational. Especially (seemingly) low involving decisions (e.g., buying a 'green' detergent) are often the result of emotional and/or heuristic processing. The majority of sustainable and cooperative behaviors are very simple behaviors, conducted several times per day (e.g., garbage disposal), and often in time pressured and distracted circumstances (e.g., deciding to donate at the entrance of the supermarket). These routine decisions will not be extensively deliberated, and even if some consumers would do so, it would be easy for them to find reasons not to opt for the cooperative alternative. Self-interest (e.g., saving money) will always be more salient than the collective interest (see Warlop, Smeesters, & Vanden Abeele, 2000).

In sum, many social marketers like to see the cooperative consumer as a rational decision maker who's knowledge, attitudes, and beliefs can be influenced by (persuasive) messages in favor of cooperative behavior (e.g. Andreasen, 1995; Rasmuson et al., 1988; Wiener & Doescher, 1991). In this dissertation, however, we will consider the 'social' consumer as being (at least partly) driven by heuristic processing or mental shortcuts. In addition, we will investigate whether subtle cues in the environment can be applied to increase consumers' likelihood of making a 'prosocial' choice.

## **Overview of Manuscripts in the (Social) Marketing Mix**

The marketing of any product, tangible or abstract, benefits from the preparation of a marketing plan, usually based on the time-honored four P's: product, price, place, and promotion. The formula by which the marketer allocates resources to each of the four P's is called the marketing mix (Kotler, Armstrong, Saunders, & Wong, 1999). In theory, the firm or non-profit organization that creates the optimum marketing mix should emerge as the most competitive one in the marketplace. Fine (1990) suggests extending the 4P's model with three more P's: producer (marketer or source of the promotion), purchaser (those to whom it must appeal), and probing (consumer research). This expanded model provides the framework needed to prepare an effective plan and achieve the optimum marketing mix. Below in Table

0.1, we illustrate how Fine's 7P's model (1990) can be applied to a social marketing program that aims to encourage condom use among teenagers.

**Table 0.1**  
7P's Marketing Mix to Encourage Condom Use among Teenagers

<i>7P's</i>	<i>Example</i>
Potential purchasers and their needs	Teenagers who just want to have sex and be 'cool'
Product to fill the teenagers' needs	Handy wrapped condoms with pictures of rock stars & different flavors
Price to obtain product	Monetary price but also the embarrassment while purchasing or using one
Availability at the best Place & Time	In private restrooms at schools & bars / Handy wrapped to lower the threshold of actually using one
Promotional tool	Advertisements with the same rock stars
Producer or source of the message	The government
Probing to evaluate campaign	Research in schools & HIV-aids statistics

In this doctoral dissertation we present three different manuscripts. Each manuscript tackles one specific 'cooperation' problem and is written so that it can be read independently of the other manuscripts. Here, we give a brief overview of the different manuscripts and try to highlight for each manuscript where it fits into the (social) marketing mix.

The first manuscript examines the role of adding a product (or exchange) to a donation request. The findings suggest that because donors are already buying something 'immaterial' (e.g., a warm glow), we do not need to offer them an additional material good (e.g., a candle). Instead, we should offer them an indication of a socially acceptable donation price to make the transaction as smooth as possible. In the second manuscript we study how people's need for food affects people's need for money and vice versa. In fact we take a closer look at the ideal circumstances to approach people with a donation request. By showing the reciprocal association between the incentive value of food and money, the paper implies that we should not ask people to donate on an empty stomach (time) or when shopping while the odor of freshly baked cookies fills the corridor (place). The final manuscript investigates a promotional tool that can be applied by non-profit organizations and commercial marketers to amplify compliance rates. Four studies demonstrate that 'mere agreeing' propositions have the ability to provoke cooperative behavior by nourishing consumers' need to help similar people.

## MANUSCRIPT I: PRODUCT AND PRICE

For many charitable organizations soliciting adequate resources to carry out their mandates is a continuing struggle. Confronted with a growing need for their services, fierce competitions from other charities and shrinking support from government agencies, charities may consult marketers for help in developing effective fundraising (Bendapudi, Singh, & Bendapudi, 1996). Although there is not much literature or data collection on fund-raising strategies, there is a great deal of ‘common’ knowledge about the best fund-raising practices. For instance, Charities and NGO’s are known to bundle donation requests with the offering of a (often near-worthless) product, like a plastic key chain, a pencil, or a set of postcards that you will never use. Doing so, they present the donation request as an exchange transaction. Although little research has investigated the usefulness of this practice, Holmes, Miller, and Lerner (2002) suggest that adding some return utility to a donation may make donating more attractive, even if the resulting utility is minimal or even illusory.

In this paper, we propose and test an alternative explanation for why consumers would react positively to donation requests that are framed as the sale of a product. One of the reasons why a priced exchange may enhance compliance is that it signals an anchor or a reference price to which potential donors can compare candidate contributions. As long as this price is appropriate and fair, it gives potential donors a comfortable cue of an expected donation amount. In a simple donation setting, on the other hand, we think that people lack an anchor that informs them on an acceptable donation amount, and thus often decide not to donate at all.

Three studies support the idea that adding exchange to charity can provide potential donors with an anchor or expected donation ‘price’. In Study 1, overall, participants were more likely to donate when offered an exchange than when no exchange was presented. Intriguingly, within the exchange conditions, participants appeared more likely to donate when they first had to estimate the value of the exchange than when they first had to indicate whether they would donate or not. On the contrary, in the simple donation setting, people lacked a reference price; many overestimated the cost of giving and thus decided not to donate. In Study 2, we found that the compliance rate in exchange conditions critically depends on the price of the token. If the token price was sufficiently low, compliance with a donation request increased relative to a simple donation situation. If the token price was rather

high, compliance with a donation request did not significantly change relative to a simple donation situation. Finally, Study 3 showed that, as expected by an anchoring explanation, a donation request that explicitly asked for a low amount generated more compliance than a simple donation request. Just as an exchange can ‘help or hurt’ depending on its price, a combined use of simple donations and specified contribution amounts can similarly influence compliance rates.

## **MANUSCRIPT II: TIME AND PLACE**

One of the strongest motivations for people living in modern societies is the desire to obtain money, but for most of man’s history ‘resources’ have connoted food rather than money (Diamond, 1997). It seems reasonable then to propose that people’s desire for money is a modern derivative of their evolved desire for food.

In three studies we show that desire for caloric resources increases the desire for financial resources and vice versa. In Study 1, hungry participants were less likely to donate to charity than satiated participants. In Study 2, an olfactory food cue, known to increase the desire to eat, made participants offer less money in a ‘give some game’ compared to participants in a room free of scent. In Study 3, the respondents’ desire for money affected the amount of M&Ms® eaten in a subsequent taste test, but only for dietary-unrestrained participants.

We discuss our findings in the light of primary and secondary reinforcers and recent neurological insights that suggest a common pathway to the processing of food and monetary rewards.

## **MANUSCRIPT III: PROMOTION**

Compliance refers to a particular response – acquiescence – to a particular kind of communication – a request. The request may be explicit, as in the direct solicitation of funds in a door-to-door campaign for charitable donations, or it may be implicit, as in a real estate agent who promotes the qualities of an apartment without directly asking to buy one. But in all cases, the target of the communication recognizes that he or she is expected to respond in a desired way. For most of us, few days pass without coming across someone who wants us to

buy a product, to visit a website, to respond to a questionnaire, to sign a petition, or help someone in need. In all sort domains, people try to influence other people; people want other people to comply with a request. In this paper, we will apply the social and interpersonal value of hypothesis-consistent testing (Dardenne & Leyens, 1995) to boost compliance rates in marketing interactions.

We suggest that triggering agreement from interviewees may increase compliance with a subsequent request from the interviewer. The increased compliance may be the result of an increased perceived similarity between interviewer and interviewee (e.g., Burger et al., 2004). In addition, we investigate whether the proposed influence of ‘mere agreeing’ indeed can be considered as a tool that boosts compliance as the result of subtle and largely heuristic processing. Finally, to provide greater external validity for the effect, we replicate our lab findings in a sample of the general population in the context of a market research telephone survey.

In four studies we investigate whether prior agreement makes interviewers more willing to help their interviewer afterwards. In Study 1, we found that ‘agreeing’ respondents perceived the interviewer or the person posing the propositions, as being more similar to them than ‘disagreeing’ or ‘neutral’ respondents. Study 2 showed that the more participants agreed on a set of propositions, the more they were willing to help ‘their interviewer’ afterwards. This effect was mediated by the perceived similarity with the interviewer. In Study 3, we suggest that the effect of mere agreeing influences cooperative behavior as the result of a well-learned script that is automatically applied when meeting with ‘similar’ people. Efforts to debias the effect led respondents to correct for this influence: after notifying participants of the former ‘mere agreeing’ (i.e. debiasing tool) the effect of mere agreeing on compliance disappeared. Finally, in Study 4, we tested the external validity of our findings. Particularly, we replicated the effect of mere agreeing on the willingness to cooperate in the setting of a market research telephone survey.

# MANUSCRIPT I

## ADDING EXCHANGE TO CHARITY: A REFERENCE PRICE EXPLANATION<sup>1</sup>

### ABSTRACT

Charities often request donations while offering a near-worthless token, like a key chain, in exchange. Little research has examined whether such ‘exchange’ requests are met with higher compliance rates than simply asking people to donate. Our studies suggest that in simple donation settings people may have difficulties in estimating a socially acceptable donation amount and therefore prefer opportunities that provide them with an anchor price. The value of a material good in a donation setting can play this anchoring role and signal a reference price. To the extent that the suggested reference price is low enough, exchange requests lead to more compliance than simple donation requests. However, our results indicate that, when accompanied by specified amounts, simple donation requests result in even better compliance rates than exchange requests.

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## 1.1 INTRODUCTION

Economists and social psychologists have often attempted to understand charitable giving from the supply side of donations: ‘Why should people make sacrifices for others?’ Recently, however, researchers have recognized the importance of considering also the demand for donations, that is, the fund-raising side of the market. Fund-raising has developed into a huge, sophisticated and competitive business (Andreoni, 2006). Although there is not much literature or data collection on fund-raising strategies, there is a great deal of ‘common’ knowledge about the best fund-raising practices. Intuition and some research (Holmes, Miller, & Lerner, 2002) suggest that adding some return utility to a donation may make donating more attractive, even if the resulting utility is minimal or even illusory. For example, charities and nongovernmental organizations are known to bundle donation requests with an often near-worthless exchange, like a plastic key chain, a pencil, or a set of postcards that you may never use. In doing so, they present the donation request as an exchange, or an economic transaction.

In this paper, we examine whether and why consumers react positively to donation requests that are framed as the sale of a product. We think that one of the reasons why a priced exchange may increase compliance is that it signals an anchor or a reference price to which potential donors can compare candidate contributions. As long as this price is appropriate and fair, it gives potential donors an indication of an expected donation amount that is comfortable. In a simple donation setting, on the other hand, we think that people lack an anchor that informs them on an acceptable donation amount, and therefore they often decide not to donate at all.

### 1.1.1 Exchange as an Alibi

To our knowledge, Holmes et al. (2002) were the first to test why adding exchange to charity can trigger more donors than simply asking people to donate. They argue that a powerful societal norm of self-interest precludes people from behaving altruistically. In fact, even individuals who experience strong feelings of compassion may be hesitant to act on those feelings because of this norm. People think that most other people are mainly driven by



self-interest (Miller & Ratner, 1998), but in fact they are more driven by altruism and compassion. As people expect other people to behave selfishly, they are quite surprised to see acts of altruism in others (Ratner & Miller, 2001). As a consequence, people prefer self-interested behavior to avoid being exploited by self-interested others, or to avoid social disapproval for being 'irrational' (Miller & Ratner, 1998; Miller, 1999). Even in a completely anonymous setting people might still want to obey the norm of self-interest because they have internalized the belief that it is the appropriate and rational thing to do (Tyler, Huo, & Lind, 1999).

Framing the donation as a commercial exchange may therefore provide potential donors a 'psychological cover' that enables them to act altruistically (i.e. an excuse for not complying with the norm of self-interest). It gives them the opportunity to show their genuine compassion, while avoiding the negative feelings associated with violating the norm of self-interest.

Construing a donation as a transaction has the additional advantage that it can limit the implications for the self of what Lerner (1986) calls 'justice motive'. By responding to appeals for unconditional help, one creates a psychological duty to be helpful to all other persons or groups worthy of help in the future: 'If I help now, I'll always have to help!' Engaging in a commercial transaction does not generate the same moral commitment.

### **1.1.2 Exchange as an Anchor**

When confronted with a donation request, the potential donor needs not only to decide whether or not to give, but also how much to give. Fraser, Hite, and Sauer (1988) suggested that potential contributors form an impression of some minimally socially acceptable anchor point to which potential contribution amounts are compared. Amounts greater than the minimum anchor are regarded as generous; Amounts smaller than the minimum are regarded as socially unacceptable. However, just like consumers may have difficulties in estimating the price of a service due to a lack of a salient cost of goods sold (Bolton, Warlop, & Alba, 2003), in a simple donation setting potential donors may also experience difficulties determining what would be an appropriate donation amount. For economic reasons they may want to avoid too large a contribution, while too small a contribution may be perceived as

inappropriate. Decision difficulty often leads to choice deferral (Dhar, 1996). Similarly, potential donors may make no contribution at all if determining the appropriate donation appears too difficult.

The option to ‘buy something’ instead of just donating may make it easier for potential donors to assess the minimally socially acceptable donation amount (cf. Fraser, Hite, & Sauer, 1988). Indeed, the reference price of the token product may serve as an anchor that is used to determine the expected donation amount and thus may influence the decision to donate. This would be similar to the finding that first offers serve as anchors and strongly predict final settlement prices in a negotiation situation (Galinsky & Mussweiler, 2001). So, the donation price one asks in exchange for a token may provide potential donors with an anchor against which contributions can be compared.

Of course, providing people with a donation anchor does not necessarily imply that they will feel compelled to donate. Indeed, justice motive theory (Lerner, 1986; Miller, 1977) states that helping someone in need should not lower one’s outcomes below a deserved level. Clearly, if the token that is offered signals too high a donation amount, people will not donate, not even in exchange for a token. In particular, donation requests coupled with ‘overpriced’ exchanges may not help or may even decrease compliance rates compared to simple donation settings, as people might fear that their own outcomes are at stake. In fact, asking a lot of money in exchange for a worthless token might be perceived as unfair.

On the other hand, tokens that are sold in a donation request may signal a donation amount that people consider being ‘fair’. First, a low priced token may signal a donation price that is lower than the perceived donation price in simple donation settings. Moreover, low priced exchanges may legitimize small contributions and, therefore, render most excuses for noncompliance (e.g., ‘We can’t afford to help.’) inappropriate and make refusal socially embarrassing. This assumption is supported by Cialdini and Schroeder’s (1976) finding that, in a door-to-door charity drive, a reminder to potential donors that ‘even a penny will help’, significantly increased the number of donations without affecting their average size. They argued that people are more likely to donate in this case because of self-presentation concerns (see also Brockner, Guzzi, Kane, Levine, & Shaplen, 1984; Reeves, Macolini, & Martin, 1987; Reingen, 1978).

Finally, if the presence of an anchor or reference price is an important factor in triggering donations, the association of simple donations and fixed prices should cause similar effects. That is, compliance rates in a simple donation setting should also be elevated when giving potential donors the opportunity to donate a specified small amount. Requesting specific large donation amounts, on the other hand, should decrease the probability of compliance. In that context, Schwarzwald, Bizman and Raz (1983) already showed that in combination with the foot-in-the-door paradigm donation sizes can be elevated by requesting specified amounts. Still, the foot-in-the-door technique is a gradual persuasion technique in which an initial, modest request is followed by a subsequent, larger request. In our research, however, we want to test whether compliance rates can be enlarged by requesting specified amounts, without the aid of a preceding modest request.

### **1.1.3 Empirical Research**

The main goal of this research was to test an anchoring mechanism for the role of adding exchange to charity. We expected more people to donate in exchange for a product compared to a simple donation condition. However, we expected this effect of exchange to be moderated by its price. Indeed, a low token price may urge people to donate as it provides them with a comfortable indication of the expected amount; that is the signal of a ‘fair’ price. On the other hand, an overpriced token or too high an anchor may not help or may even inhibit people from donating. Further, if an exchange can ‘help or hurt’ depending on its price, we hypothesize that specifying contribution amounts in the context of simple donations should bring about compliance rates that are comparable to those in exchange settings.

## **1.2 STUDY 1**

In the first study, we explored the effect of an exchange on the incidence and amount of donations. We controlled for the frivolous or functional nature of the token exchange, because this has been found to make a difference in the context of bundling charity donations to the purchase of a product (e.g., for every package of its coffee sold during the Christmas Holidays, Douwe Egberts® recently donated one serving of coffee to the homeless in Belgium). In this context Strahilevitz and Myers (1998) found that charity incentives were

more effective in promoting frivolous products than practical products. They suggested that donations complement or neutralize the negative feelings associated with indulging in frivolous consumer behavior (see also Kivetz & Simonson, 2002). By means of a pre-test we obtained two products that differ significantly in frivolity, but score equally on a functionality-scale: regular and colored staples (both €0.50 real shop value).

To explore our prediction that an exchange might signal an anchor or reference price that may induce people to donate, we asked participants to estimate the value of the offered products either before or after the donation decision. If people are more likely to donate when their attention is first drawn to the product value, this would yield further support for our assumption that the value of the product in the exchange serves as an anchor that guides people in their donation decision.

## **1.2.1 Method**

### 1.2.1.1 Participants

A total of 144 volunteer undergraduate economics students participated in this scenario study which was part of a written questionnaire, conducted in groups of about 20 people.

### 1.2.1.2 Materials and procedure

The participants were randomly assigned to one of three experimental conditions. They were asked to donate to a charity without a product being offered (simple donation), donate in exchange for the ‘functional’ staples (practical exchange), or donate in exchange for the ‘frivolous’ staples (frivolous exchange). The charity used in the scenario was described as follows: ‘An organization that delivers basic medicine for the treatment of diseases as malaria, tuberculosis, and African trypanosomiasis (sleeping sickness) in parts of Africa, Asia, & Latin-America’. In the exchange conditions, a picture of the staples accompanied the appeal. Participants had to indicate whether or not they would be willing to donate and how much.

In the exchange conditions, we also asked participants to estimate the shop value of the product either before or after the donation request. As the shop value of a product may somehow differ from the value participants think its worth to them on that moment in time, we added a third exchange condition in which we asked participants before the donation request how much they would pay for the product if they would have the chance to buy it 'here and now, under these circumstances'. The donation request and the value estimation were always presented on different sheets of paper.

In all, then, our design consisted of 1 simple donation condition and 6 exchange conditions. The latter represented a 2 (type of product: functional vs. frivolous) by 3 (combination of questions: (1) donation request before shop value, (2) shop value before donation request, and (3) 'here&now-value' before donation request) design.

## **1.2.2 Results**

The frivolous versus functional nature of the token did not significantly affect our results. We therefore collapse over this factor in our analysis. This leaves three different conditions in which participants were offered an exchange: donation request before shop value (Exchange 1), shop value before donation request (Exchange 2), and 'here&now-value' before donation request (Exchange 3). Together with the simple donation condition (Donation), this leads to four different experimental conditions (see Table 1 for the different cells).

### 1.2.2.1 Compliance probability

A logistic regression with donation (yes versus no) as the criterion, and experimental condition as the categorical predictor (with 4 levels), revealed that compliance varied across the experimental conditions, LR  $\chi^2(3) = 14.81$ ,  $p = .002$  (see Table 1). In line with our hypothesis, planned contrasts revealed that the compliance rate was significantly higher in the conditions where participants had to estimate the value first (Exchange 2 & Exchange 3) than in the conditions where participants had to decide whether or not to donate first (Donation & Exchange 1), LR  $\chi^2(1) = 12.65$ ,  $p = .0004$ . Moreover, the compliance rate was not significantly higher in the exchange condition in which the donation question was asked first

(Exchange 1) than in the simple donation condition (Donation), LR  $\chi^2(1) < 1$ , n.s. The compliance rate was significantly higher in the exchange conditions in which a value question was asked first (Exchange 2 & Exchange 3) than in the exchange condition in which the donation question was asked first (Exchange 1), LR  $\chi^2(1) = 5.58$ ,  $p = .02$ .

**Table 1.1**  
Donation Rate and Mean Amount Donated as a Function of Experimental Condition

	Simple Donation		Exchange	
	Donation <sup>a</sup> ( $n = 48$ )	1 Donation before shop price valuation ( $n = 32$ )	2 Donation after shop price valuation ( $n = 35$ )	3 Donation after 'Here & Now' valuation ( $n = 29$ )
Donation rate	46%	56%	80%	80%
Non zero mean amount	€ 12.2	€ 4.9	€ 5.1	€ 4.1
Total revenue, $n = 100$	€561.2	€274.4	€408	€328

Note. <sup>a</sup>The donation question was the only question in this condition.

In an additional analysis of the exchange conditions we also included the value that participants estimated. This analysis revealed a marginally significant interaction between the estimated value and when the value questions were asked, LR  $\chi^2(1) = 3.27$ ;  $p = .071$ : When participants had to estimate the value first (Exchange 2 & Exchange 3), the donation intention decreased as the estimated value increased; when participants received the donation question first (Exchange 1), the estimated value had no effect on the compliance rate.

### 1.2.2.2 Contribution revenues

Since within-condition donations were not normally distributed, we analyzed the donation amounts of the participants who made contributions non-parametrically ( $N = 89$ ; two outliers were excluded from analysis using  $\pm 3$  SD). We conducted a Kruskal-Wallis Test with amount as the dependent variable and experimental condition (4 levels) as the independent variable. A main effect of experimental condition was obtained,  $\chi^2(3) = 12.82$ ;  $p = .005$ . Subjects in the simple donation condition donated significantly more,  $\chi^2(1) = 11.27$ ;  $p = .001$ , than those in the exchange conditions.

In an additional analysis of the contributions in the exchange conditions ( $N = 67$  contributors), we again included the estimated value (i.e. shop value or ‘here & now’ value dependent on the condition; logarithmic transformed) as a covariate. This ANCOVA revealed a significant positive effect of the estimated value on the contribution size,  $F(1, 63) = 31.50, p < .0001$ : The higher contributors estimated the product value, the more they contributed.

### 1.2.3 Discussion

Overall, participants were more likely to donate when offered an exchange than when no exchange was presented. Intriguingly, within the exchange conditions, participants appeared more likely to donate when they first had to estimate the value of the exchange than when they first had to indicate whether they would donate or not. In addition, in the exchange conditions where participants had to estimate the value first, the likelihood of donation decreased as the estimated value went up. In the exchange condition where participants first had to decide whether or not to donate, the estimated value was not related to the outcome of the donation decision.

Possibly, in a donation situation, people try to construct some minimally socially acceptable anchor point against which candidate contribution amounts are compared. As the magnitude of that lower anchor increases, the magnitude of the contribution will increase, but the probability of compliance will decrease (cf. Fraser et al. 1988). Indeed, the higher our participants estimated the value, the less likely they were to comply with the donation request, but the more money they were planning to donate if they did decide to donate.

Asking participants to estimate the value of the product before they decided to donate may have cued a ‘donation anchor’. The product value (shop value or the value participants think it is worth to them on that very moment), probably functioned as a reference price and gave people an indication of the expected donation amount. In addition, as the product was rather inexpensive, the donation anchor was for most participants sufficiently low to persuade them to donate. In the simple donation condition, participants may not only have had more difficulty to construct a donation anchor, they also may have constructed a more elevated donation anchor. Two pieces of evidence support this assumption. First, the variance of the donation amount (logarithmic transformed) was much higher in the simple donation condition

( $SD = .34$ ) than in the exchange conditions ( $SD = .22$ ):  $F(1, 87) = 7.21, p = .009$  (Levene's Test for Equality of Variances). Second, for the donating participants, donation amount was significantly higher in the simple donation condition than in the exchange conditions. In fact, the mean amount donated in the simple donation condition was rather elevated ( $M = €12.2$ ). Many participants in the simple donation condition presumably overestimated the 'cost' of donating, and hence decided not to donate. This is consistent with the assumption that participants in the simple donation condition lack an anchor that informs them about an acceptable donation amount. In the exchange condition, such an anchor is provided by the shop value or 'here&now' value (whichever is measured) of the product that is offered in exchange for the donation.

One potential alternative explanation for the findings in Study 1 deserves mention. The fact that people donate more easily when they first have to estimate the product value, may be similar to a foot-in-the-door effect. The foot-in-the-door paradigm suggests that compliance breeds compliance. Having agreed to an initial request, individuals infer that they are helpful and cooperative. When subsequently confronted with a second and larger request, people are more likely to comply so as to maintain a consistent self-image. In our experiment, the value estimation question might have functioned as the first modest request, which was then followed by the second and larger donation request. Although we doubt the validity of this alternative explanation because answering a value question is hardly comparable to a compliance request, we try to rule it out by collecting additional data in Study 2.

### **1.3 STUDY 2**

Study 2 provides a more critical test of our hypothesis that people donate more easily when their attention is drawn to a low product value. In addition, we also test whether an exchange can be 'overpriced' and consequently, can inhibit people from donating compared to a simple donation baseline condition. Finally, in the current study, participants have to make a real donation decision, rather than a decision in a scenario. That is, if they decide to donate, they actually have to give some money.



As the type of product did not matter in Study 1, we use only one product (colored paperclips; € 0.50 real shop value) in the exchange condition. To test our hypothesis, we manipulate the value of the paperclips (€3 vs. €0.50) in the donation request. We hypothesize that the €0.50 paperclips will signal a ‘fair’ donation price, a socially acceptable anchor which will persuade people to donate. The €3 paperclips, on the other and, can represent too large an anchor that does not induce but rather inhibits people to donate compared to the simple donation context.

### **1.3.1 Method**

#### 1.3.1.1 Participants

Participants were 184 undergraduates (from several majors), who were paid €7 for their participation in a number of unrelated experiments, ending with the current study.

#### 1.3.1.2 Material and procedure

Participants were invited to the lab in groups of at most eight people. In a brief introduction they were told that they would participate in a series of unrelated experiments. At the end of the session when participants had been paid €7, registered and thanked for their participation, they received an envelope with the invitation to donate. They were asked to have a look at it in their cubicle before leaving the room. The letter explained that the Marketing Department had organized its annual donation drive, and that all marketing students and experimental participants were being given the chance to make a donation as well. The money would go to ‘an organization that delivers basic medicine for Africa, Asia, & Latin-America’, as in Study 1.

Participants were randomly assigned to one of four experimental conditions: They were invited (1) to just donate (simple donation condition), (2) to donate in exchange for paperclips without a shop value mentioned (no value exchange condition), (3) to donate in exchange for paperclips with a mentioned shop value of €3 (€3-exchange condition), (4) or to donate in exchange for paperclips with a mentioned shop value of €0.50 (€0.50-exchange condition). This shop value was mentioned between brackets after the description of the

offered product. In the exchange conditions, the product (colored paperclips) was included in the envelope. Participants were told that they could take the product home when donating some money; any amount was said to be appreciated. To make any donation between €0.50 and 7 € possible, the €7-endowment was paid in coins of €0.50, €1, and €2. Finally, all participants were asked to close the envelope and leave it in the donation box at the entrance of the laboratory. This donation box was used to increase the feeling of anonymity. Donations were actually contributed to 'Médecins Sans Frontières' (Doctors Without Borders).

## **1.3.2 Results**

### 1.3.2.1 Compliance probability

A logistic regression with donation (yes versus no) as the criterion, and experimental condition as the categorical predictor (with 4 levels), confirmed our hypotheses. Compliance varied significantly across the experimental conditions, LR  $\chi^2(3) = 12.23, p = .007$  (see Table 2). The compliance rate was significantly higher in the €0.50-exchange condition than in the simple donation condition, LR  $\chi^2(1) = 5.63, p < .02$ . In contrast, the compliance rate was slightly lower in the €3-exchange condition than in the simple donation condition, although the difference did not reach significance, LR  $\chi^2(1) < 2, n.s.$  In summary, we found evidence for the moderating role of the price of an exchange in triggering potential donors. Price does matter; the compliance rate was significantly higher in the €0.50-exchange condition than in the €3-exchange condition, LR  $\chi^2(1) = 11.05, p = .0009$ .

Although the compliance rate was slightly more elevated in the no-value exchange condition than in the simple donation condition, this difference was not significant, LR  $\chi^2(1) < 2, n.s.$

**Table 1.2**

Donation Rate and Mean Amount Donated as a Function of Experimental Condition

	Simple Donation		Exchange	
	N/A ( <i>n</i> = 52)	No Value ( <i>n</i> = 46)	€3 ( <i>n</i> = 44)	€0.5 ( <i>n</i> = 42)
Value of exchange product				
Donation rate	50%	61%	39%	74%
Non zero mean amount	€ 1.46	€ 1.93	€ 3.00	€ 1.53
Total revenue given <i>n</i> = 100	€73	€117.7	€117	€113.2

### 1.3.2.2 Contribution revenues

Again, since donations were not normally distributed, a non-parametric analysis was applied. We conducted a Kruskal-Wallis Test on the data of the donating participants ( $N = 102$ ) with donation amount as the dependent variable and experimental condition (4 levels) as the independent variable. The amount donated was affected by the experimental condition,  $\chi^2(3) = 16.8$ ,  $p = .001$ . Not surprisingly, the participants in the €3-condition donated on average more than those in the other conditions. The other conditions did not significantly differ.

### **1.3.3 Discussion**

In this study, the ‘exchange’ effect appears to be dominated by the price of the token. In line with Study 1, the €0.50-token signaled a comfortable reference price, leading to an elevated compliance rate. However, as the price of the token increased to €3, the compliance rate plummeted. For larger donation requests to be effective, they have to be perceived as lying within a plausible range for donation (Doob & McLaughlin, 1989). Whereas €3 is often used as a real donation price for products offered by NGO’s, many students in this context (they had just worked for an hour to receive €7) may not have perceived the €3 as lying within a plausible range of acceptance. In line with this assumption, the justice motive theory (Lerner, 1986) would suggest that participants thought of €3 as being a threat to their own outcomes.

Finally, when looking at the results of Study 2, the alternative foot-in-the-door explanation of Study 1 seems to be no longer valid. In Study 2, there was no initial value estimation that could have functioned as a first modest request. In that sense, the estimated value in Study 1 has the same anchoring function as the mentioned shop value in Study 2: Whether participants first have to estimate the product value (Study 1) or whether the value is already mentioned, people donate more easily when they are presented with a low product value, as opposed to an exchange setting in which no price indication is present.

### **1.4 STUDY 3**

In Study 1, some participants in the exchange conditions were asked to estimate the value of the product before deciding to donate. This apparently gave them a comfortable reference price, a rather low ‘donation anchor’. In the simple donation condition, on the other hand, participants lacked a donation anchor; they had problems in estimating a ‘fair’ price, and seemed to construct a more elevated donation anchor. In Study 2, we found that the compliance rate in exchange conditions critically depends on the price of the token. If the token price is sufficiently low, compliance with a donation request increases relative to a simple donation situation. If the token price is rather high, compliance with a donation request does not significantly change relative to a simple donation situation.

To the extent that the sale of a token simply signals an expected donation amount, one might wonder whether influencing compliance rates requires an exchange at all. In fact, providing people with an explicit low reference price in a simple donation setting might be enough to cause comparable results to the low priced token exchange in Study 1 and 2. By the same reasoning, similarly low compliance rates as in high-priced exchange conditions may be obtained when donation requests are accompanied by an explicit high reference price. These issues are addressed in our third study.

## **1.4.1 Method**

### 1.4.1.1 Participants and design

A total of 196 undergraduates participated in this between-participants computerized questionnaire study. The questionnaire was part of one hour session of unrelated experiments in the lab. Participants were paid €6 for completing the entire questionnaire packet.

### 1.4.1.2 Procedure

We told participants we were investigating their donation behavior. The general instruction read as follows: ‘To be able to adjust the annual donation drive of the Marketing Department, we want some feedback concerning your donation preferences. You will be presented with ten different hypothetical situations. Please try to indicate for each situation whether you would donate or not.’ All scenarios explained that the Marketing Department each year organized a donation drive and that all marketing students and experimental participants were given the chance to make a donation as well; after an experimental session participants were supposedly approached to make a donation.

Participants were randomly assigned to one of five experimental scenarios. In the simple donation scenarios, they were asked to indicate whether or not they would donate and if so, how much. In the low and high priced donation condition they were asked whether or not they would donate €0.50 or €3. In the low and high priced token condition they were asked whether or not they would donate in exchange for a € 0.50 or €3 token, respectively. All scenarios were repeated ten times, using ten different charities in all conditions and ten different products in the exchange conditions. The pairing of charities and products was randomized for each participant in the exchange conditions separately.

## 1.4.2 Results

### 1.4.2.1 Compliance probability

We conducted a logistic regression with the proportion of ‘yes’-responses as the criterion, and experimental condition (5 levels) as the predictor. A significant main effect of experimental condition was obtained, LR  $\chi^2(4) = 107.72$ ,  $p < .0001$  (see Table 3). As expected, participants in the low priced conditions (donation & exchange) were more likely to comply than people in the high priced conditions, LR  $\chi^2(1) = 67.96$ ,  $p < .0001$ , and than people in the simple donation baseline condition, LR  $\chi^2(1) = 65.83$ ,  $p < .0001$ , respectively. As in Study 2, however, the frequency of compliance in the high priced conditions did not significantly differ from the simple donation baseline condition, LR  $\chi^2(1) < 2$ , n.s.

Unexpectedly, the proportion of participants agreeing to offer money was greater in the priced donation conditions (low & high) than in the priced exchange conditions (low & high), LR  $\chi^2(1) = 14.71$ ,  $p = .0001$ . Moreover, the compliance rate was significantly higher in the high priced donation condition than in the simple donation condition, LR  $\chi^2(1) = 7.59$ ,  $p = .0059$ . The compliance rate did not significantly differ between the high priced exchange condition and the simple donation condition, LR  $\chi^2(1) < 1$ , n.s. Finally, the difference between exchange and priced donations was comparable for a high (3.00 €) and low price (0.50€), LR  $\chi^2(1) < 1$ , n.s.

**Table 1.3**

Proportion of ‘Yes’-Responses as a Function of Experimental Condition

	Simple Donation	Priced Donation		Priced Exchange	
	Baseline ( $M = €8.8$ ) ( $n = 41$ )	Low (€0.50) ( $n = 37$ )	High (€3.00) ( $n = 40$ )	Low (€0.50) ( $n = 38$ )	High (€3.00) ( $n = 40$ )
Donation rate	47%	75%	57%	67%	45%
Total revenue	€413.6	€37.5	€171	€33.5	€135

given  $n = 100$

### 1.4.2.2 Contribution revenues

In the current study, only in the simple donation condition, participants could decide on the amount they were willing to donate. As in Study 1, the large variance ( $SD = 11$ ) of the donation amount in the simple donation condition is consistent with our assumption that potential donors, in the absence of an anchor (i.e. an exchange), experience problems in determining a socially acceptable donation amount. Many participants presumably overestimate the ‘cost’ of donating ( $M = €8.8$ ) and hence decide not to donate at all. The other four conditions exhibit fixed prices and participants could not alter this amount. Contrary to the first two studies, participants received no instruction that any amount would be appreciated. In that sense, analyzing the contribution revenues in the current study yields no additional insight.

### **1.4.3. Discussion**

The data support our hypothesis that bundling simple donations with fixed prices would generate similar results as bundling donation requests with priced tokens. The presence of a small or large reference price in a simple donation setting can apparently fulfill the same ‘anchoring’ function as the sale of a token. Moreover, our data show that ‘priced’ donation requests are met with an even higher compliance than the corresponding exchange conditions. Most counter-intuitive is the fact that the high priced donation request yields significantly greater probability of compliance than the simple donation condition. As for the high priced exchange request, we notice a small but insignificant drop in compliance compared to the simple donation setting. We assume therefore that it is not the high price in itself which seems to be responsible for the low compliance rate in the high priced exchange condition, but a high price in exchange for a near-worthless token. Rather than pure economic reasons, feelings of exploitation (Miller & Ratner, 1998) or the norm of self-interest may be part of the excuse for not donating in exchange for high priced tokens: ‘The postcard presumably is less expensive in the supermarket’. Bundles of simple donations and fixed prices possibly entail a smaller risk that potential donors feel exploited.

## 1.5 GENERAL DISCUSSION

Three studies support the idea that adding exchange to charity can provide potential donors with an anchor or expected donation amount. People react positively to donation requests that are framed as the sale of tokens, if the tokens signal a low anchor amount, a ‘fair’ price. In a simple donation setting, people lack a reference price. In their attempt to estimate a socially acceptable donation amount, many overestimate the cost of giving and thus decide not to donate. Therefore, the offer of a token can signal a reference price or an anchor to which other donation amounts may be compared (Fraser et al., 1988). A ‘low’ socially acceptable anchor will urge people to donate as it signals a ‘fair’ price and leaves people feeling ‘trapped’ in a good deal. A ‘high’ socially unacceptable or too large an anchor, on the contrary, may inhibit people from donating.

In our studies, we did not seek to investigate if and why tokens in general (with or without a reference price) would affect donation decisions. In that context, it should be noted that our studies were not designed to rule out the exchange fiction theory of Holmes et al. (2002), which states that adding exchange to charity provides potential donors with a ‘psychological cover’ that enables them to act altruistically while still complying with the norm of self-interest. In fact, our first two studies are still in line with the theory of the norm of self-interest (Miller, 1999). Still, our anchoring explanation gives an additional account for why people react positively to the sale of tokens in a donation request. Moreover, Study 3 shows that, as expected by our anchoring explanation, a donation request that explicitly asks for a low amount generates more compliance than a simple donation request. Just as an exchange can ‘help or hurt’ depending on its price, a combined use of simple donations and specified contribution amounts can similarly influence compliance rates. This finding cannot be accommodated by Holmes et al.’s exchange fiction theory. Nevertheless, our anchoring explanation is not incompatible with the Justice Motive Model of human motivation (Lerner, 1986) that underlies the exchange fiction theory. The justice motive predicts that if people are given the opportunity to help innocent victims and if doing so will not threaten their own deserving, then people will be highly responsive. In other words, once people are reassured (for example by a low reference price) that their personal outcomes are not in jeopardy, it seems easy to induce them to donate.



The reverse effects of reference price on compliance probability and contribution per contributor indicate that a lot of thought should be given to the reference price that is signaled in order to optimize total revenue. For instance, in exchange situations, if the token is perceived as being ‘overpriced’, people may be inhibited from donating, possibly due to feelings of exploitation or the norm of self-interest. A participant’s post experimental reaction demonstrates this: ‘This is very odd, I would rather just donate €3 than to buy a useless postcard!’ This is consistent with the observation that offering a product in exchange for a donation may activate self-serving motivations and ‘economic’ thoughts about the usefulness of the product; whereas simply asking for a donation could set in motion more social equity concerns (Van Dijk, 2003). From practical point of view, in that sense, bundles of simple donations and fixed prices are perhaps the safest option. In those settings, people know that their money in its entirety would be given to the described charity whereas in the exchange setting the actual cost of the product remains somewhat ambiguous. The transparency in donation settings with specified prices may be the reason why priced donations work even better than the offer of an exchange (see Table 3). Moreover, in donation settings with specified prices there is also no product cost that needs to be subtracted from overall revenue. In all, then, donation settings with specified prices may generate higher revenues than the sale of small products.

Finally, we like to rule out that people donate more easily in exchange for a product compared to a simple donation setting out of reciprocity concerns. When there is reciprocity (Cialdini, 2001) you receive something first and then you feel obliged to donate something in return. For example, Falk (2004) found strong and systematic effects from including gifts in donation letters: The relative frequency of donations increased by 17 % when a small gift was included and by 75 % for a large gift. In our experiments, however, you’re openly asked to donate in exchange of a product. The transaction is immediately proposed. This implies that a reciprocity explanation cannot account for our findings. Moreover, if reciprocity would be part of the process, we would at least have to find a significant difference between the simple donation condition and the no-value exchange condition, and this was never the case in our experiments.

## 1.6 CAVEATS AND FUTURE RESEARCH

The first limitation of our research is that two of our three studies were scenario studies and did not measure real behavior. Nevertheless, the compliance rate (our main dependent variable) is quite comparable across the three experiments. On the other hand, the mean amount donated in the simple donation condition was substantially higher in our scenario studies (Studies 1 & 3), than in our study that entailed real behavior (Study 2). This finding is consistent with the notion that people do not always have a perfect insight in how they would behave in certain situations (e.g., Nisbett & Wilson, 1977) and important to keep in mind when comparing the total revenues of the three experiments.

A second limitation is that our participants were all college students. It is important to assess the validity of our findings across other populations. In any event, our results appear to be stable across sexes. Integrating the findings of Brockner et al. (1984), Cialdini and Schroeder (1976), and Fraser et al. (1988), we note that the size of the anchor points may change over time due to inflation and are probably population dependent (e.g., dependent on income: students vs. businessmen). Accordingly, we suggest the €3-token condition might result in different compliance rates in another population and/or several years from now. In that sense, it would be worthwhile for charities to ‘know’ their different donor types to be able to segment the donor database according to the size of the anchor points influencing donors’ decisions. Additionally, the charity might even decide to cut or raise donation prices depending on the organization’s marketing strategy, for example reaching a critical mass of ‘small’ donors or only a select group of ‘large’ donors.

Third, it is possible that the application of charity related tokens, which the donor can use to ‘signal’ his social reliability (e.g., an HIV ribbon or an Amnesty candle), would generate different results. In this case reputation concerns might be involved in the donation decision (Milinski, Semmann & Krambeck, 2002).

An interesting avenue for future research would be to test whether priced donation requests, compared to simple donation requests, can also improve response rates in a direct mail context. For example, although legitimizing small contributions significantly increased

the number of donations in a door-to-door charity drive (Cialdini & Schroeder, 1976), this technique failed to boost compliance rates in a direct mail fund-raising (DeJong & Oopik, 1992). There is evidence that donations in a direct mail campaign can be strongly influenced by choosing appropriate quantities in the request (Desmet & Feinberg, 2002), but so far these appeal scales have not been tested against a simple donation setting.

In this research, the charities we used were rather major and well-known in the country. It would be interesting to investigate whether Sinha and Batra's finding (1999) that consumers are more price conscious when they perceive price unfairness by national brands (which results in private label purchases), also holds for charities. If consumers are also more price conscious when they perceive price unfairness by national charities, well-known national charities would have to pay extra attention when determining their token prices. Moreover, local charities (e.g., local basketball team) then may even have a competitive advantage of using 'higher' prices before being perceived as 'unfair'.

Finally, in our studies, participants' donation decisions were influenced by an informative anchor and participants were probed to consider the anchor as a possible donation value. Future research should also explore whether similar results can be obtained by means of 'basic anchoring'. Basic anchoring is the situation in which people's judgments of a target are influenced by a numerical anchor that is completely uninformative (e.g., a number generated by a wheel of fortune) and where people are not asked to consider the anchor as a possible target value (cf. Wilson, Houston, Etling & Brekke, 1996). Suppose, for example, that students before answering the donation request had just written down the price of a beer, which happens to be €1.50. Would this unrelated and uninformative small numerical anchor induce them to donate? Feinberg (1986), for example, found more people donating a larger amount when a credit card donation option (i.e. a 'spending' cue) was present. Feinberg's finding may be explained by the fact that a credit card signals a large but unspecified amount, that is, a vague indication of an expected contribution that could not be perceived as lying 'outside' the plausible range of acceptance.

## 1.7 EPILOGUE

Each day people perform acts of altruism. To economists this phenomenon is difficult to explain: If people are all selfish utility maximizers, why should they make sacrifices for others? Several explanations have been proposed to address this question. These include the desire to experience a 'warm glow' (e.g., Isen & Levin, 1972), a need to view oneself as good and kind (Walster, Berschied & Walster, 1973), an aspiration to 'do the right thing' (Dawes & Thaler, 1988), a quest for moral satisfaction (Kahneman & Knetsch, 1992), or a signal of social reliability to gain indirect reciprocity or political reputation (Milinski et al., 2002). What these explanations all have in common is the underlying assumption that helping other people gives you something in return. This suggests that one way of thinking about charitable giving is to view potential donors as consumers seeking some return utility from donating money. However, because they are already buying something 'immaterial' (e.g., a warm glow), perhaps we do not need to offer them an additional material good (e.g., a candle). Crucial in the marketing of donations is to make the transaction as smooth as possible. We should offer them an indication of a comfortable expected donation amount. In other words, we should just 'name them a price' as long as this is appropriate and fair.

## MANUSCRIPT II

### HUNGRY FOR MONEY

#### THE DESIRE FOR CALORIC RESOURCES INCREASES THE DESIRE FOR FINANCIAL RESOURCES AND VICE VERSA<sup>2</sup>

##### ABSTRACT

This paper attempts to provide an evolutionary explanation for humans' motivation to strive for money in present-day societies. We propose that people's desire for money is an adaptation of their desire for food. In three studies we show the reciprocal association between the incentive value of food and money. In Study 1, hungry participants were less likely to donate to charity than satiated participants. In Study 2, an olfactory food cue, known to increase the desire to eat, made participants offer less money in a 'give some game' compared to participants in a room free of scent. In Study 3, the respondents' desire for money affected the amount of M&Ms® eaten in a subsequent taste test, but only for dietary-unrestrained participants.

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<sup>2</sup> This manuscript is adapted from Briers, B., Pandelaere, M., Dewitte, S., & Warlop, L. (in press). Hungry for money: The desire for caloric resources increases the desire for financial resources and vice versa. *Psychological Science*. Financial support from the National Science Foundation (FWO-Flanders, Belgium; grant G.0260.02 to the first and fourth author, grant G.03.91 to the third and fourth authors), from the Katholieke Universiteit Leuven (grant OT/03/07 to the third and fourth authors), and from Belgian Science Policy (grant CP01/151 to the fourth author), and from Censydiam-Synovate is gratefully acknowledged.

## 1.1 INTRODUCTION

One of the strongest motivations for people living in modern societies is the desire to obtain money. The cultural dominance of money is striking: it has been adopted irresistibly by any human society that encountered it (Lea & Webley, 2005). But in spite of the extraordinary power of money, for most of mankind's history 'resources' have connoted food rather than money (Diamond, 1997). Collecting or producing enough food to survive has always been man's main challenge. It seems reasonable then to consider a biological basis for our attraction to money.

The canonical economic model assumes that the utility from money is indirect, and is only valued for the goods or services it can procure (e.g., Camerer, Loewenstein, & Prelec, 2005). In psychological terminology, standard economics considers money as a conditioned reinforcer. While food is generally considered as a primary reinforcer, money can be consumed only indirectly. As a consequence, standard economics views the desire for food and the desire to obtain money as two different strivings. The relationship between both reinforcers must be asymmetric: money can buy food, but food cannot buy money. However, some neurological evidence suggests that the relationship between money and food might be more entwined than most economists would predict. Breiter, Aharon, Kahneman, Dale, and Shizgal (2001) found that the orbitofrontal cortex is activated by monetary rewards, whereas O'Doherty, Deichmann, Critchley, and Dolan (2002) found the orbitofrontal cortex to be activated by the consumption and anticipation of sweet-tasting food rewards. The overlap in neural activation suggests a common pathway to the processing of money and food rewards, which may have major implications for the standard economical perspective on the utility for money.

Some behavioral evidence is consistent with the proposed tangled relation between financial and caloric resources. Nelson and Morrison (2005) found that men who either feel poor or hungry prefer heavier women than men who feel rich or satiated. The authors suggest that preference for women's body weight is determined by people's individual experience of resource scarcity. This is consistent with the finding that in cultures with scarce resources, heavier women are preferred to slim women (e.g., Pettijohn & Jungeberg, 2004; Symons,

1979). As male financial and caloric deprivation appears both related to perceived ideal female body weight, we suggest that cues signaling scarcity in one domain might also motivate people to acquire or maintain resources in the other domain. Thus, we claim that people are less likely to sacrifice money when they desire food and eat more when they desire money. Three studies tested this hypothesis.

## **1.2 STUDY 1**

Study 1 aimed to show that hunger affects donation behavior. We manipulated hunger and measured participants' willingness to donate to charity. If deprivation of one of these reinforcers influences the other, then hungry participants should donate less than satiated participants.

### **1.2.1 Method**

Eighty-eight undergraduates (80 men) participated in exchange for course credit. They had been asked not to eat within four hours before the study and not to drink anything but tea, coffee or water. Eighteen participants failed to comply and were excluded. The remaining participants received a donation scenario and a taste test. In the hunger condition, the donation scenario preceded the taste test. In the satiated condition, the order was reversed.

We told participants that the Marketing Department organized an annual donation drive and that students would be given the chance to make a donation. The alleged aim of the present study was to investigate which good cause students preferred. The general instruction read as follows: 'To allow us to adjust the annual donation drive of the Marketing Department, we want some feedback concerning your donation preferences. You will be presented with ten different hypothetical situations. Please indicate for each situation whether you would donate or not.' The scenario was repeated ten times, using ten different charities.

During the taste test, participants had to eat a big piece of cake. The taste test consisted of twenty questions about taste, color, structure and healthiness of the cake. In

satiated condition, participants subsequently completed filler tasks before the donation task to allow satiation to set in, which takes about 20 minutes (Guyton, 1971).

### 1.2.2 Results

After removing four participants who had not completed the questionnaire properly, a repeated logistic regression on the participants' 10 binary choices with the experimental condition as the predictor revealed that hungry participants were less likely to donate (mean donation probability = .36) than satiated participants (mean donation probability = .44), LR  $\chi^2(1) = 4.64$ ,  $p_{\text{rep}} = .906$ ,  $\log(\text{OR}) = .35$ . That is, hunger makes people hold on to their money more.

## 1.3 STUDY 2

In Study 1, satiated participants may have felt obligated to return something for the cake. To rule out reciprocity as an alternative explanation, we manipulated the desire to eat food by means of an olfactory food cue in Study 2. Participants had to play a 'give some game' in a room that either was or was not scented with freshly baked brownies. Exposure to an olfactory food cue is known to increase craving, liking, and the desire to eat the cued food (e.g., Federoff, Polivy, & Herman, 2003).

### 1.3.1 Method

Fifty-eight undergraduates (all women) participated for course credit. All participants had eaten during the four hours before the experiment. Time since last meal was recorded to control for non-experimental variation in hunger. In the scent condition ( $n = 32$ ), the scent of baking brownies wafted into the laboratory when participants entered. In the control condition, no scent was present in the lab ( $n = 26$ ). The scent manipulation was counterbalanced with time of the day.

Next, participants played a computerized 'give some game'. They were allocated 10 Euro coins, which they could either keep or donate to their opponent, who would



simultaneously make the same decision. Each coin kept was added to the participant's account; each coin donated was doubled by the experimenter and added to the opponent's account. To make the procedure consequential, the experimenter announced that five randomly selected participants would actually be paid according to the outcome of the game.

### 1.3.2 Results

An ANOVA with number of coins donated as the dependent variable, scent presence as the independent variable and time-since-last-meal as a control variable revealed that participants in the scent condition gave fewer coins to their opponent compared to participants in the control condition,  $M_{\text{scent}} = 2.7$ ,  $M_{\text{control}} = 3.9$ ;  $F(1, 55) = 4.18$ ,  $p_{\text{rep}} = .883$ ,  $\eta_p^2 = .071$ . There was no effect of time-since-last-meal,  $F(1, 55) = 2.80$ , n.s.

## 1.4 STUDY 3

Studies 1 and 2 suggest that the desire for food makes people more likely to hold on to their money. In Study 3, we tested the inverse relationship. We manipulated participant's 'desire for money' by inducing lottery-winning fantasies. If hunger and 'desire for money' may influence one another, 'desire for money' should affect the amount of food eaten in a subsequent taste test. We further expect that food restriction goals will attenuate this effect. Additionally, we controlled for mood because bad mood enhances food consumption (e.g., Macht & Simons, 2000).

### 1.4.1 Method

Sixty-two undergraduates (20 men and 42 women) participated for an endowment of €7. Half the respondents had to imagine winning €25 000 on the lottery (high-desire-for-money condition) whereas the other half had to imagine winning €25 (low-desire-for-money condition). All participants were instructed to make a list of all things they would dream of buying if they would win the specified amount.

We had pretested this lottery manipulation relying on Bruner and Goodman's finding (1947) that the value of money interferes with normal perceptual processing. Since people with a high desire for money (e.g., poor children) overestimate the size of coins relatively to people with a low(er) desire for money (e.g., rich children), we hypothesized that participants in the €25.000-condition would estimate the size of euro coins larger than participants in the €25-condition. After listing what they would buy, 38 pretest participants were asked to identify the actual coin size among a set of seven coin sizes (ranging from 92.5% to 107.5% of the actual size; with option '4' being the true coin size) for five coins (€0.10, €0.20, €0.50, €1, and €2). The average estimated coin size was larger in the high-desire-for-money condition than in the low-desire-for-money condition,  $M_{\text{high-desire}} = 3.50$ ,  $M_{\text{low-desire}} = 2.99$ ,  $t(36) = 2.04$ ,  $p = .049$ ,  $\eta_p^2 = .10$ .

In the actual experiment, after the lottery scenario, participants' mood was measured using the PANAS (Watson, Clark, & Tellegen, 1988). Subsequently, participants were instructed to complete the taste test. They were given two bowls of the same volume, one with regular M&Ms (400 grams), and the other with the 'new' crispy M&Ms (300 grams). They were told that they were participating in a comparative taste test of M&Ms. They were allowed to eat as many M&Ms as necessary to evaluate them on several dimensions (e.g., 'are they crunchy?'). Quantity consumed was unobtrusively measured. Participants then received the 'Dutch questionnaire of Eating Behavior' (van Strien, Frijters, Bergers, and Defares, 1986), which measures to what extent people restrain their food intake in order to loose, or not to gain, weight. Participants were classified as restrained when their score on the restraint scale exceeded 2.8 (i.e. the sample median) ( $n = 26$ ).

### 1.4.2 Results

An ANOVA with desire-for-money and restraint as the independent variables and time since participants' last meal and gender as control variables, revealed a significant main effect of desire-for-money,  $F(1, 56) = 7.07$ ,  $p_{\text{rep}} = .95$ ,  $\eta_p^2 = .11$ . The main effect was qualified by an interaction with restraint,  $F(1, 56) = 3.98$ ,  $p_{\text{rep}} = .8778$ ,  $\eta_p^2 = .066$ . Planned comparisons revealed that the unrestrained respondents ate more M&Ms in the high-desire-for-money condition than the low-desire-for-money condition,  $M_{\text{high-desire}} = 38$  grams,  $M_{\text{low-desire}} = 18$  grams;  $F(1, 32) = 8.47$ ,  $p_{\text{rep}} = .96$ ,  $\eta_p^2 = .21$ . For the restrained respondents, the

money manipulation did not affect the amount consumed,  $M_{\text{high-desire}} = 23$  grams,  $M_{\text{low-desire}} = 21$  grams;  $F(1, 22) < 1$ , n.s. In addition, male respondents ate more than females,  $F(1, 56) = 5.61$ ,  $p_{\text{rep}} = .927$ ,  $\eta_p^2 = .091$ , and consumption decreased with increasing time since the last meal,  $F(1, 56) = 4.87$ ,  $p_{\text{rep}} = .908$ ,  $\eta_p^2 = .080$ . Probably respondents did not want to spoil their appetite before an upcoming meal.

The effects of ‘desire for money’ were not mediated by mood. First of all, the ‘desire for money’ manipulation influenced neither positive mood [ $\alpha = .77$ ;  $F(1, 60) < 1$ , n.s.] nor negative mood [ $\alpha = .81$ ;  $F(1, 60) < 1$ , n.s.]. Second, neither positive mood [ $F(1, 60) < 1$ , n.s.] nor negative mood [ $F(1, 60) < 1$ , n.s.] affected the amount of M&Ms consumed.

## 1.5 GENERAL DISCUSSION

Three studies show a symmetric association between the incentive value of food and money. In Study 1, hungry participants were less likely to donate to charity than satiated participants. In Study 2, an olfactory food cue, known to increase the desire to eat, made participants offer less money in a ‘give some game’ compared to participants in a room free of scent. In Study 3, the respondents’ desire for money affected the amount of M&Ms eaten in a subsequent taste test, but only for unrestrained participants. We propose that people’s desire for money relies on human’s adaptation to collect food.

To our knowledge we are the first to test the psychological link between money and food empirically. According to Gurven (2002), evolutionary psychologists and economists should be careful in generalizing their findings from monetary economic games to non-market situations and in drawing conclusions about the evolutionary origins of cooperation based upon monetary lab experiments. Part of our contribution therefore exists in providing support to evolutionary psychologists’ assumption that findings involving money are informative about findings involving food and vice versa. Our results may further provide a partial explanation for Nelson and Morrison’s (2005) finding that financial and caloric deprivation appears both related to perceived ideal female body weight. The preference of lower income men for heavier women, as well as the acceptability of a larger body size for lower income

women for example, might be interesting social phenomena that can be well predicted from our findings.

An avenue for future research is to investigate the overlap in neurological activation due to ‘desire for money’ on the one hand, and to ‘desire for food’ on the other hand. The emerging evidence that both reward systems share a brain region (e.g., Breiter et al., 2001; O’Doherty et al., 2002) might suggest that this region is involved in the processing of all kinds of rewards (Montague & Berns, 2002; Wilson & Daly, 2004). For example, neural evidence suggests that the same dopaminergic reward circuitry of the brain in the midbrain is activated for a wide variety of different reinforcers, including attractive faces (Aharon et al., 2001), funny cartoons (Mobbs et al., 2003), cultural objects like sports cars (Erk et al., 2002), drugs (Schultz, 2002), and money (Breiter et al., 2001).

The idea that many rewards are processed similarly in the brain has important implications for economics, which assumes that the marginal utility of money depends on what money buys. Our findings suggest that money becomes a ‘primary reinforcer,’ which means that people value money without carefully computing what they plan to buy with it. The emerging area of neuroeconomics suggests the possibility that the value of money is only loosely linked to consumption utility (Camerer et al., 2005). This possibility is further supported by the noteworthy parallels between research on money and food. The tool theory of money (Lea & Webley, in press) and the set-point assumption of food (Pinel, Assanand, & Lehman, 2000) have in common that they consider money or food as instrumental: money as a means to obtain biologically relevant incentives and food as a means to prevent the body’s energy resources to fall below an energy set-point. However, several findings were inconsistent with both instrumental theories. Bruner and Goodman (1947) found that children overestimate the size of coins relative to other stimuli, so people’s value of money apparently interferes with their normal perception of it. Likewise, people do not only eat to restore their energy level, but because of the anticipated pleasure of eating. The more recently advanced drug theory of money (Lea & Webley, in press) and positive-incentive theory of food (Pinel et al., 2000), share the view that money and food have value beyond their instrumentality and can account for those findings.

Finally, the entwined association between food and money may help us understand why especially poor people are more vulnerable to overeating and suffer ill health as a result.

In industrialized countries such as the USA (Drewnowsky & Specter, 2004) as well as in developing countries (James, 2004), obesity is usually associated with poverty. Perhaps in present-day societies the attraction to money is so powerful that people who, relatively speaking, fail in their quest for (more) money become frustrated. Accordingly, as financial and caloric resources are exchangeable, they might tend to appease their desire for money by consuming more calories than is healthy.

## **MANUSCRIPT III**

# **BETTER THINK BEFORE AGREEING TWICE THE EFFECT OF MERE AGREEING ON COMPLIANCE IN MARKETING INTERACTIONS<sup>3</sup>**

### **ABSTRACT**

This research demonstrates that triggering agreement from respondents increases their willingness to help the interviewer afterwards. We show that this effect (1) is mediated by perceived similarity with the interviewer, (2) is primarily the result of mindless processing, and (3) also holds in a real life marketing research telephone survey.

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## 1.1 INTRODUCTION

For most of us, few days pass without encountering someone who solicits our cooperation to respond to a questionnaire, to sample a product, to visit a website, or to donate to a humanitarian organization. For decades, researchers have been focusing on tools that boost compliance rates in this type of situations, both in marketing (e.g., Tybout, 1978; Fern, Monroe, & Avila, 1986; Hornik, 1992; Deutskens, De Ruyter, Wetzels, & Oosterveld, 2004) and in social psychology (e.g., Freedman & Fraser, 1966; Hornik, 1987; Nannberg & Hansen, 1994; Burger, Messian, Patel, Prado, & Anderson, 2004). Whereas seminal studies focused on persuasion through explicit social forces that were well within conscious awareness (e.g., Asch, 1965; Milgram, 1964), recent studies have focused on influence processes that are subtle, indirect, or unconscious (Cialdini & Goldstein, 2004). The present paper extends this latter line of research.

In four studies we investigate whether triggering agreement from interviewees makes them more willing to help their interviewer afterwards. We start by discussing the literature on mere agreeing propositions as a positive testing tool with social utility value. Next, we elaborate on the underlying process through which agreement might influence subsequent compliance: We look at perceived similarity as a mediating factor and propose that the influence of mere agreeing on cooperation is largely driven by heuristic processing. The contribution of this paper is threefold: we show (1) that mere agreeing increases compliance with a subsequent request for help, (2) that perceived similarity is the mechanism underlying this causal process and that this process is largely heuristic, and (3) that the mechanism also holds in a real life marketing research context. In sum, we present marketers and policy makers in search with a new compliance increasing tool, which has proven its robustness across different circumstances.

### 1.1.1 The Social Value of Positive Testing

Hypothesis-consistent testing or positive testing is the tendency to select questions that match your initial ideas or expectations about a person (e.g., Davies, 1997). For example, when people evaluate the hypothesis that someone is introverted, they ask questions like ‘Do

you like to be on your own?,' which elicit an affirmative answer if the respondent is introverted (Zuckerman, Knee, Hodgins, & Miyake, 1995).

Positive testing has traditionally been considered as an inaccurate way of collecting information. To test a hypothesis people should look for disconfirmation, rather than for confirmation (Nisbett & Ross, 1980; Wason, 1960). However, in a social interaction, positive testing may be more appropriate (cf. Leyens, Dardenne, & Fiske, 1998). Indeed, while trying to form an accurate perception of their interaction partners, people may also pursue the goal of getting along with them, not only during common encounters (e.g., Chartrand & Bargh, 1999) but also during an interview (Leyens, Yzerbyt, & Shadron, 1994). Correspondingly, several studies (e.g., Dardenne & Leyens, 1995; Leyens et al., 1998) highlighted the pragmatic function of positive testing during an interview.

Consistent with this pragmatic approach to positive testing, research showed that asking hypothesis-consistent questions can be rewarding and entail some social value (see Leyens, Dardenne, Yzerbyt, Scaillet, & Snyder, 1999). Leyens (1989) showed that the questions that interviewers produce are more hypothesis-consistent when they interact with an interviewee than when they only prepare questions for a future interview. Hypothesis-consistent questions are also more frequent at the beginning of an interview than at the end. He proposes that hypothesis-consistent questions have social value in that they smoothen the interview. Indeed, when the context stresses the relevance of positive testing, for example when interviewing a high-status interviewee, a preference for questions that match the hypothesis demonstrates a social skill (Dardenne & Leyens, 1995). In addition, Leyens et al. (1998) demonstrated that hypothesis-consistent questions were especially valuable when the interviewer's goal was to display empathy, that is, when the interviewer was motivated to show that s/he was able to share in the other person's feelings and beliefs. Finally, Pandelaere, Hoorens, and Peeters (2003) found that 77% of their participants engaged in positive testing when evaluating causal events. Pandelaere et al. (2003) even argued that the pervasiveness of the positive test strategy allows interviewees to infer what hypothesis the interviewer entertains solely from the type of question s/he asks.

In sum, several studies suggest that positive testing is a tool with social utility value. However, to the best of our knowledge, it has not been documented why that is the case and whether it could be used to boost compliance. We suggest that positive testing using mere



agreeing propositions facilitates the interaction between the interviewer and the interviewee because it increases the interviewee's perceived similarity with the interviewer. As a result, compliance with a request from the interviewer may increase.

### **1.1.2 Mere Agreeing, Similarity, and Compliance**

We contend that triggering agreement from interviewees can cause them to think of themselves as holding attitudes similar to those of their interviewer. In the present series of studies, we will test this prediction. Particularly, we think that 'agreeing' respondents may perceive the interviewer as being more similar to them than 'disagreeing' or 'neutral' respondents. Furthermore, we expect to find a spillover of this 'similarity' effect to the interviewees' willingness to help the interviewer subsequently.

As mentioned earlier, predicting other people's behavior, attitudes, and preferences helps us to behave in an appropriate manner in social circumstances. The dominant view has been that people tend to give too much weight to their own attitudes in predicting others'. The phenomenon of assuming that others behave and believe like oneself has been studied in numerous settings and hence a variety of terms have been used to describe it, such as *attributive projection* (e.g., Holmes, 1968 ), *assumed similarity* (e.g., Cronbach, 1955), *egocentric attribution* (e.g., Heider, 1958 ), a *lack of empathy* in developmental research (e.g., Flavell, 1985), and *false-consensus effect* (e.g., Ross, Greene, & House, 1977). As a result, when encountering an unknown person, people tend to assume relatively high levels of similarity between that person and themselves, until clear evidence proves the opposite. In concert, the assumption that other people (such as an unknown interviewer) are highly similar and interviewees' assumed tendency to use the questions as indicative of the interviewer's attitudes, it seems likely that positive testing will boost perceived similarity with the interviewer. Hence, we hypothesize that 'agreeing' respondents may perceive an unknown interviewer as being more similar to them than 'disagreeing' or 'neutral' respondents.

Next, it is widely accepted that perceived similarity with a requester can lead to increased compliance. For instance, a subtle means by which requesters utilize the similarity principle for maximal influence is to dress in a manner similar to their targets' (Emswiller, Deaux, & Willits, 1971). In marketing interactions, perceived similarity between buyers and

sellers has proven to result in greater likelihood of purchase (Woodside & Davenport, 1974), in more cooperation (Mathews, Wilson, & Monoky, 1972) and altruism (Deutsch & Kotik, 1978). Even when the apparent similarities are based on superficial matches such as shared names, birthdays, or fingerprint types (Burger et al., 2004), they are capable of increasing compliance rates.

Compliance with a request from someone with whom we share a birthday or with whom we agree is, however, not more rational or justifiable than compliance with a request from someone with a different birthday or with whom we disagree. Thus, a thoughtful consideration of the help request should produce similar compliance rates between the experimental (e.g., agreeing) and control conditions. However, because participants often respond to requests with heuristic processing, they might react as if the request comes from a friend or acquaintance (Burger et al., 2004). That is, heuristic processing can lead to an increase in compliance when salient cues (e.g., same birthday or same attitudes) indicate this is the kind of person we usually say ‘yes’ to or the type of cause we usually support.

### **1.1.3 Mindless Processing and Corrective Influence**

If the increased compliance that we hypothesize in these studies is the result of heuristic processing, it implies that the awareness of this influence should reduce the relation between mere agreeing and compliance. Whether or not the influence of mere agreeing on compliance is heuristic, has important practical implications: Because consumers possess persuasion knowledge and easily draw inferences about marketers’ ulterior motives and goals (Friestad & Wright, 1994), the technique we propose should be carefully crafted to avoid suspicion. Therefore, one of the goals of this paper is to examine whether the ‘mere agreeing’ effect on compliance is the result of mindless, as opposed to elaborative, processing. If mere agreeing triggers compliance through the use of a heuristic, efforts to debias the effect should lead respondents to correct for this influence. On the other hand, if mere agreeing on propositions changes cooperative behavior through an elaborative mechanism, then debiasing techniques, such as notifying the respondent of the fact that s/he agreed often, may leave the effect unaffected or even boost it.

Both in marketing and social psychology several lines of research demonstrate that directing people's attention towards a source influencing their judgment leads to a correction of that judgment. For instance, like in most priming studies, Strack, Schwarz, Bless, Kübler and Wänke (1993) found that trait judgments based on ambiguous behavior were assimilated toward the primed trait categories, however, this was only the case if participants' attention was not directed towards the primes. In fact, if participants were reminded of the priming episode, contrast effects were obtained (see also Lombardi, Higgins, & Bargh, 1987). A marketing example can be found in the work of Shiv, Carmon and Ariely (2005). They documented the placebo effect of price promotions, which illustrates that consumers who are paying a discounted price for a product can end up deriving a smaller subjective benefit from the product. They succeeded to 'debias' the placebo-effect of price promotions by reminding participants of the discounted price. More examples of similar attenuation effects are found for the false-fame effect (Jacoby, Kelley, Brown, & Jasechko, 1989), the mere-exposure effect (Bornstein & D'Agostino, 1992), the influence of mood on funniness ratings (Neumann, Seibt, & Strack, 2001), the activation of stereotypes (Lepore & Brown, 2002), and the mere-measurement effect (Williams, Fitzsimons, & Block, 2004). In this study, we also apply the reminder procedure to investigate to what extent the mere agreeing effect on compliance is heuristic.

#### **1.1.4 Overview of Studies**

In four studies we show that the more participants agree on a set of propositions, the more they are willing to help 'their interviewer' (i.e. the person who made up the propositions) afterwards. In Study 1, mere agreeing compared to mere disagreeing or responding 'neutrally' enhanced the perceived similarity with the interviewer in the interviewee's eyes. In Study 2, the effect on similarity mediated the mere agreeing effect on the interviewee's cooperation with the interviewer. Study 3 showed that the mere agreeing effect is primarily the result of mindless, as opposed to effortful, processing: After being reminded of the number of times they agreed (i.e. debiasing tool), participants corrected for this influence. Finally, in Study 4 we tested the external validity of our findings. Particularly, we replicated the effect of mere agreeing on compliance in the setting of a market research telephone survey, using both a correlational and an experimental research methodology.

## 1.2 STUDY 1: THE EFFECT OF MERE AGREEING ON PERCEIVED SIMILARITY

Study 1 aimed to show that mere agreeing, compared to mere disagreeing or responding neutrally, can cause people to believe that their ‘interviewer is more similar to them. We manipulated the extent to which participants agreed or disagreed on eight propositions (on seven-point scales). Next, we measured the perceived similarity with the interviewer.

### 1.2.1 Method

Participants were randomly assigned to one of three experimental conditions: the agreeing, the disagreeing, or the control condition. Pretests found that overall agreement differed significantly between the agreeing, disagreeing, and control condition. In the agreeing condition, participants received eight propositions with respect to ecological behavior to which on average they would all agree (e.g., ‘I sometimes commute by bike rather than by car’). In the disagreeing condition, participants received eight propositions with respect to ecological behavior to which on average they would all disagree (e.g., ‘I always use public transportation instead of my car’). In the control condition, participants received eight unrelated propositions to which on average they would all remain ‘neutral’ (e.g., ‘I read the newspaper every day’).

Forty-seven subjects were invited to participate in a number of unrelated computerized experiments in exchange for course credit. Participants came to the laboratory in groups of maximum eight people and were tested in individual cubicles. Upon arrival in the lab, participants had to indicate for each of the eight propositions, whether or not they agreed on a seven point scale (ranging from ‘I definitely do not agree’ to ‘I definitely agree’). Next, we looked at the extent to which participants associated or disassociated themselves with the person who made up the propositions. Participants were instructed to imagine the interviewer (i.e. the person who had made up the propositions) when answering the following three items on a seven point scale (Hafer, 2000): (1) ‘To what extent do you think the interviewer is like you’, (2) ‘To what extent do you think the interviewer and yourself share the same interests’, (3) Overall, how much do you identify with the interviewer’. As an additional indicator of

perceived similarity we also included a psychological measure of interpersonal closeness (Aron, Aron, & Smollan, 1992). This measure of closeness uses seven pictures of two circles, one representing the self and the other representing the interviewer. The seven pictures differ with respect to the overlap between the two circles, ranging from no overlap to full overlap. We used the average of the three association items and the interpersonal closeness measure as a proxy for the perceived similarity between the participants and the interviewer ( $\alpha = .88$ ).

### 1.2.2 Results and Discussion

A manipulation check confirmed that the overall agreement between the agreeing, neutral, and disagreeing condition, differed significantly in the predicted direction,  $M_{\text{agreeing}} = 5.7 > M_{\text{neutral}} = 4.2 > M_{\text{disagreeing}} = 3.3$ ;  $F(2,44) = 21.43$ ;  $p < .0001$ . Next, a one-way ANOVA of perceived similarity with three levels of the experimental condition (agreeing vs. control vs. disagreeing) revealed a main effect,  $F(2,44) = 5.96$ ,  $p < .006$ . Participants in the agreeing condition perceived the interviewer as more similar than participants in the disagreeing ( $M = 4.3$  versus  $M = 3.0$ ;  $t(1,30) = 3.4$ ;  $p < .003$ ) or the control condition ( $M = 4.3$  versus  $M = 3.4$ ;  $t(1,29) = 2.6$ ;  $p < .02$ ). The disagreeing and the control condition did not significantly differ ( $M = 3.0$  versus  $M = 3.4$ ;  $t < 1$ ; ns). The results suggest that agreeing participants perceive the interviewer as being more similar to them than disagreeing or neutral respondents

## 1.3 STUDY 2: THE EFFECT OF MERE AGREEING ON COMPLIANCE THROUGH PERCEIVED SIMILARITY

We conducted Study 2 to investigate whether the effect of mere agreeing on similarity would spillover to the participants' compliance with a subsequent request for help by the interviewer. Since in Study 1 the disagreeing and the control condition did not significantly differ, we decided to continue our research with only two conditions: the agreeing and the control condition.

In our first study, the propositions in the control condition were unrelated to those we used in the agreeing and disagreeing conditions. For Study 2, therefore, we improved the control condition by using the same eight items as in the agreeing condition. However, the

control condition had to be ‘neutral’, so we reframed four (out of eight) agreeing items such that they were likely to trigger disagreement. Thus, the control condition consisted of four agreeing and four disagreeing items. Furthermore, in Study 2, we aimed to create a more ‘incidental’ and ‘irrelevant’ feeling of similarity by using propositions that relate to all different kinds of topics (e.g., sports, culture, food, the weather ...) rather than the eight ecological behaviors we used in Study 1.

### **1.3.1 Method**

Participants were randomly assigned to one of two experimental conditions: the agreeing or the control condition. As in Study 1, in the agreeing condition, participants received eight propositions with a high probability of agreement (e.g., ‘I am happy when the weather is nice’ and ‘As a child I usually had someone to look up to’). In the control condition, participants received four items with a high probability of agreement (e.g., ‘I am happy when the weather is nice’) and four reframed items with a low probability of agreement (e.g., ‘As a child I never had someone to look up to’). Pretests indicated that overall agreement was significantly higher in the agreeing condition than in the control condition.

Participants were invited to the lab in groups of maximum eight people to take part in a series of unrelated computerized experiments. Sixty-six undergraduates participated in return for a participation fee. As in Study 1, upon entering the lab, participants had to indicate for each of the eight propositions, whether or not they agreed on a seven point scale (ranging from ‘I totally don’t agree’ to ‘I totally agree’). After a filler task, the participants were instructed to imagine a scenario in which the ‘interviewer’ needed some help for his/her master’s thesis: Participants had to imagine being approached by this student interviewer who had constructed the eight propositions they had just judged. As a part of a larger personality research the interviewer had to conduct about 100 surveys (15 item questionnaire) by telephone. In order to do that s/he was looking for volunteers to make some of the phone calls.

Participants could indicate on a visual analogue scale with endpoints ‘few’ and ‘many’, and midpoint ‘average’, how many phone calls they would be willing to make. Pretests and prior research revealed that quantified pro-social intention measures are fraught with

noise. First, there is strong anchoring around numerical tags presented in a scale, which is an indication that many statements of value and belief are not directly retrieved from memory but rather are constructed online in response to a query (Chapman & Johnson, 1999). Second, because people have different norms of what is appropriate, a self-generated numeric value of their cooperation (e.g., the number of phone calls they intend to make) is unreliable (Briers, Pandelaere, & Warlop, 2006). We therefore deliberately removed the exact number from the measure and included a tag reflecting the average number of phone calls people were willing to make in ‘prior’ studies (see e.g., Nelson & Norton, 2004). This provides participants with a clear norm, and they can indicate whether they intend to invest (1) as much or more than other people on the one hand or (0) less than others on the other hand. We used this dichotomous measure in the analysis.

After the cooperation measure, we again administered the same perceived similarity scales as in Study 1. They allowed us to construct a proxy for the perceived similarity with the interviewer ( $\alpha = .79$ ). Next, because our manipulation might affect mood and because mood can have an effect on cooperative behavior (e.g., Berkowitz, 1987), we also measured mood using the PANAS (Watson, Clark, & Tellegen, 1988). Finally, participants had to rate themselves on a visual analogue scale (80 points) with endpoints ‘cooperative’ and ‘uncooperative’, to be able to control for their specific disposition to cooperate.

### 1.3.2 Results

After removing two outliers<sup>4</sup> (Barnett & Toby, 1996), we conducted a logistic regression with the binary cooperation variable as the criterion, and experimental condition (agreeing vs. control) as the categorical predictor. We also controlled for negative mood, positive mood, and one’s disposition to cooperate.

A manipulation check confirmed that the overall agreement between the agreeing and the neutral condition, differed significantly in the predicted direction,  $M_{\text{agreeing}} = 5.9 > M_{\text{control}} = 4.4$ ;  $t(1, 62) = 12.26$ ,  $p < .0001$ . In line with our hypothesis, the probability of cooperation

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<sup>4</sup> Based on the extent to which participants (dis)agreed on the propositions and their answer on the ‘telephone’ scenario, a Mahalanobis distance was calculated for each participant to determine the outlying participants (Barnett & Toby, 1984). These Mahalanobis distances follow a Chi-Square distribution, in this case with 1 degree of freedom. All participants with a distance higher than the .990 fractile were considered outliers. This led to the identification of 2 participants as outliers. We decided to drop these participants from the analysis.

was higher in the agreeing condition than in the control condition,  $M_{\text{agreeing}} = 0.45$ ,  $M_{\text{control}} = 0.22$ ; LR  $\chi^2(1) = 4.27$ ,  $p < .04$ . To provide evidence that the cooperation effect was mediated at least in part by the perceived similarity with the interviewer, we conducted a mediation analysis using the technique recommended by Baron and Kenny (1986). First, in addition to the significant effect of the experimental condition on the willingness to cooperate in the telephone scenario, there was a significant effect of experimental condition on perceived similarity with the interviewer,  $M_{\text{agreeing}} = 4.1$ ,  $M_{\text{control}} = 3.6$ ;  $F(1, 59) = 4.92$ ,  $p < .04$ . Second, perceived similarity and willingness to cooperate were positively related, LR  $\chi^2(1) = 9.42$ ,  $p < .004$ . Finally, when both experimental condition and perceived similarity were entered as predictors in the equation, perceived similarity still predicted cooperation significantly, LR  $\chi^2(1) = 6.92$ ,  $p < .009$ , whereas the effect of experimental condition on cooperation was attenuated, LR  $\chi^2(1) < 2$ ,  $p > .18$ . Further, using a version of the Sobel test (Sobel, 1992) recommended by Baron and Kenny, the reduction in the direct effect of the experimental condition on cooperation, was significantly different from zero, 95% CI  $[-.2121 < Z < -.0041]$ , providing support for mediation of perceived similarity.

### **1.3.3 Discussion**

In summary, the second study shows that the effect of mere agreeing on perceived similarity spills over to the participants' compliance with a subsequent request. Moreover, perceived similarity between participants and interviewer mediated the effect of mere agreeing on the interviewees' willingness to help the interviewer afterwards.

## **1.4 STUDY 3: THE EFFECT OF MERE AGREEING ON COMPLIANCE AS A RESULT OF MINDLESS PROCESSING**

In Study 3 we aimed to examine the mindless versus effortful nature of the underlying process responsible for the effect of mere agreeing on cooperation. To examine to what extent the process is mindless, we used the debiasing tool (e.g., Shiv et al., 2005). Specifically, we made the number of times that a respondent had agreed with a stranger salient. If mere agreeing changes compliance through a mindful or elaborative mechanism, then debiasing should not attenuate the effect of agreeing on compliance, or may even increase the effect



size. On the other hand, if the mechanism is largely mindless, then debiasing may give respondents the opportunity to actually correct for this automatic influence.

### 1.4.1 Method

One hundred and fifty participants were randomly assigned to one of four conditions in a 2 (positive testing: agreeing versus control) X 2 (debiasing condition: debiasing versus no debiasing) between-subjects design. Apart from the debiasing manipulation, the procedure of Study 3 was identical to the one we used in Study 2.

In the debiasing condition, prior to the telephone scenario, we showed participants an overview of their answers on the eight propositions. For example, if a person in the agreeing condition previously agreed on 6 out of 8 items, the computer program automatically generated a table with 6 times 'I (definitely) agree'. In the no debiasing condition, like in Study 2, the telephone scenario immediately followed the eight propositions. If the effect of mere agreeing on compliance is the result of mindless processing, then reminding participants of how often they agreed with an unfamiliar person, should attenuate the effect

### 1.4.2 Results

As in Study 2, we used a dichotomous cooperation measure with one group of participants (0) willing to make less phone calls than average, and one group participants (1) indicating to conduct as many or more phone calls than average. A manipulation check again showed a significant difference between the agreeing and the control condition in the predicted direction,  $M_{\text{agreeing}} = 6.0 > M_{\text{control}} = 4.3$ ;  $t(1, 143) = 21.3$ ,  $p < .0001$ . After removing five outliers<sup>5</sup>, we conducted a logistic regression with positive testing (agreeing versus control) and debiasing condition (debiasing versus no debiasing) as the categorical predictors, and the binary cooperation variable as the criterion. Again we controlled for negative mood, positive mood, and one's disposition to cooperate.

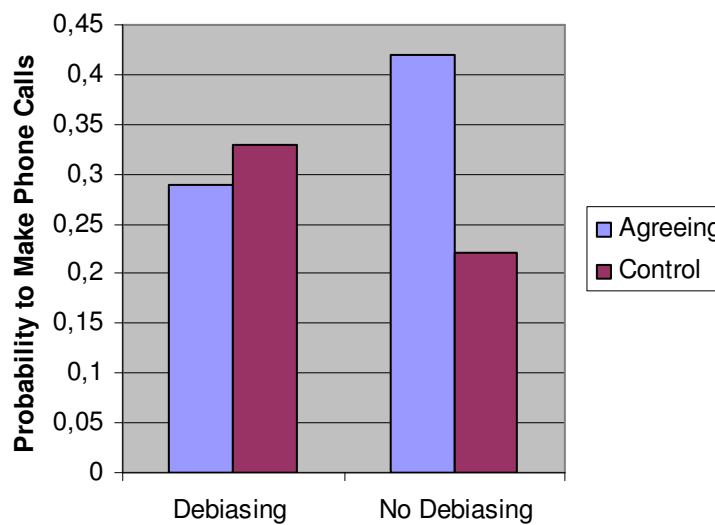
The analysis revealed a significant interaction between positive testing and debiasing condition, LR  $\chi^2(1) = 4.22$ ,  $p < .04$  (Figure 1). Without debiasing, participants in the agreeing condition were more likely to cooperate than participants in the control condition,  $M_{\text{agreeing}} =$

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<sup>5</sup> The same procedure as in Study 2 was applied.

0.42,  $M_{\text{control}} = 0.22$ ; LR  $\chi^2(1) = 4.17$ ,  $p < .05$ , replicating Study 2. In the debiasing condition, however, the effect of agreeing on compliance disappeared,  $M_{\text{agreeing}} = 0.29$ ,  $M_{\text{control}} = 0.33$ ; LR  $\chi^2(1) < 1$ , n.s.

**Figure 1**  
 STUDY 3: Means for the Probability to Make Phone Calls  
 in the Agreeing and Control Condition for Debiasing or No Debiasing



In addition, when we included the interaction between perceived similarity ( $\alpha = .81$ ) and debiasing condition in the equation, we found a marginally significant interaction between debiasing and the mediator, LR  $\chi^2(2) = 4.76$ ,  $p < .10$ . Perceived similarity was not involved when we showed participants an overview of their answers. However, when participants were not informed of their answers (like in Study 2), a mediation analysis (cf. Baron & Kenny, 1986) indicated that perceived similarity mediated the effect of mere agreeing on subsequent compliance. In particular, the following three conditions for mediation were supported in the condition without debiasing (i.e. replicating Study 2): (1) the independent variable (agreeing versus control) significantly affected the mediator (i.e. similarity), LR  $\chi^2(1) = 7.91$ ,  $p < .007$ ; (2) the independent variable (agreeing versus control) affected the dependent variable (likelihood to make phone calls), LR  $\chi^2(1) = 4.17$ ,  $p < .05$ ; (3) the mediator significantly affected the dependent variable, LR  $\chi^2(1) = 5.76$ ,  $p < .02$ . Most importantly, when the mediator and the independent variable were both included in the

analysis, the effect of perceived similarity on subsequent compliance remained, LR  $\chi^2(1) = 3.60, p < .06$ , whereas the effect of mere agreeing on compliance was attenuated, LR  $\chi^2(1) < 2, p > .22$ . Once again, a Sobel test indicated that the reduction in the direct effect of mere agreeing on compliance, was significantly different from zero, 95% CI  $[-.3361 < Z < -.0052]$ , providing support for mediation of perceived similarity.

### **1.4.3 Discussion**

Study 3 illustrates that the effect of mere agreeing on compliance is caused by rather mindless, as opposed to effortful, processing. Informing participants about the extent to which they previously agreed with an unknown other (i.e. debiasing), apparently makes them aware of the extraneous influence of mere agreeing and prompts them to correct for it. Furthermore, among the participants who were not informed of the number of ‘agreeing’ answers, we replicated the findings of Study 2: perceived similarity between participants and interviewer mediated the effect of mere agreeing on the interviewees’ likelihood to help the interviewer afterwards.

## **1.5 STUDY 4: REPLICATION IN THE FIELD**

The fourth study was conducted to test the ecological validity of our findings in another population and in a real life setting. We tested the effect of mere agreeing on compliance in a market research telephone survey. Particularly, we examined whether the level of agreeing on propositions would influence respondents’ willingness to subscribe for participation in future questionnaires. For the data collection, we collaborated with a local market research company. In a correlational study (4a), we used secondary data and investigated whether the level of agreement with propositions that were used as part of a larger market research correlated with compliance. In the experimental study (4b), the compliance and the setting was real life, but we manipulated the level of agreement by varying the set propositions, just like we did in the previous lab studies.

## Study 4a: a correlational study using real life questions

### A 1.5.1 Method

The first study was a correlational study on secondary data. Its purpose was to investigate the link between mere agreeing and compliance across another population outside the laboratory. Data were obtained from a local market research company that collected the data in 2005 for a well known publisher of newspapers. A representative (telephone) sample of 180 respondents was drawn by means of the Last-Birthday Method<sup>6</sup> (e.g., Oldendick, Bishop, Sorenson, & Tuchfarber, 1988). The questionnaire contained 40 multiple choice items that explored all kinds of media related issues: reading habits, media interests, satisfaction .... Halfway the questionnaire, participants received five propositions with which they could (dis)agree on a five point scale. The propositions probed the new smaller format of the newspaper (e.g., ‘The new format encourages me to read more of the newspaper’ and ‘I do not like the new format, I prefer the old one’). At the end of the survey, after the demographics, the interviewers asked for the participants’ willingness to cooperate in future surveys.

### A 1.5.2 Results and Discussion

The average on the five (dis)agree propositions turned out to be significantly positively correlated with the respondents’ willingness to leave their name and address for participation in future surveys ( $r = .15, p < .05$ ). In other words, the more participants agreed with the propositions on the new format, they more likely they were to comply with the request.

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<sup>6</sup> This approach capitalizes on the fact that within households with multiple adults (i.e., more than one person who qualified to serve as a respondent), selecting one adult on the basis of which has the most recent birthday is a random process.

## Study 4b: an experiment manipulating agreeing in a real life setting

### B 1.5.1 Method

A representative sample of respondents was again drawn by means of the Last-Birthday Method (Oldendick et al., 1988). Ninety-two participants were randomly assigned to one of two experimental conditions: the agreeing or the control condition. In order to have eight items in each experimental condition, we pretested 15 propositions (comparable to those of the previous studies) in both directions, agreeing and disagreeing. As in Study 2 and 3, the control condition consisted of four ‘agreeing’ and four ‘disagreeing’ items. For the actual experiment, it was vital for the experimental test that the interviewers read the computerized script word by word, so we decided to run the survey with two rather inexperienced interviewers (one of each gender).

In a brief introduction, participants were told about the market research company and the purpose of the survey: Supposedly the market research company needed peoples’ opinion in order to adjust their upcoming services. After participants gave their permission to respond to the questionnaire, they (1) had to indicate whether or not they agreed on the eight propositions on a three point scale (agree = 1, neutral = 2, or disagree = 3), (2) were asked to give their name and address if they were willing to participate in comparable surveys in the future (i.e. cooperation measure), and (3) were asked for some demographics.

### B 1.5.2 Results

A manipulation check confirmed the significant difference between the level of agreement in the agreeing and the control condition,  $M_{\text{agreeing}} = 1.11 < M_{\text{control}} = 1.98$ ,  $t(1, 90) = 27.45$ ;  $p < .0001$ . Next, a logistic regression with the binary cooperation variable as the criterion, and experimental condition (agreeing vs. control) and the interviewer (male versus female) as the categorical predictors, revealed a positive main effect of the experimental condition on the participants’ willingness to cooperate in future surveys,  $M_{\text{agreeing}} = 37.5\%$ ,  $M_{\text{control}} = 31.8\%$ ,  $\beta = 0.854$ , LR  $\chi^2(1) = 2.66$ ,  $p = .05$  (one-sided). We also found a main effect

of interviewer, LR  $\chi^2(1) = 9.51, p < .005$  (i.e. the effect of agreeing was larger for the male than for the female interviewer), but there was no significant interaction between experimental condition and interviewer, LR  $\chi^2(1) < 1, n.s.$

### **1.5.3 Discussion**

In these two field studies, we were able to extend the validity of our findings to another population in a marketing research context. The final study in particular illustrates the potential impact of incorporating mere agreeing propositions in a real life telephone survey.

## **1.6 GENERAL DISCUSSION**

### **1.6.1 Review of key findings and theoretical implications**

Consistent findings across four studies demonstrated the applicability of ‘mere agreeing’ propositions as a subtle compliance increasing tool. In Study 1, we found that ‘agreeing’ respondents perceived the interviewer or the person presenting the propositions as more similar to them than ‘disagreeing’ or ‘neutral’ respondents. Study 2 showed that the more participants agreed with a set of propositions, the more they were willing to help ‘their interviewer’ afterwards. This effect was mediated by the perceived similarity between the participants and the interviewer. Study 3 suggests that the effect of mere agreeing on compliance is primarily the result of mindless processing: after notifying participants of the former ‘mere agreeing’ (i.e. debiasing tool) the effect of mere agreeing on compliance disappeared. Finally, in Study 4, we tested the generalizability of our findings. Particularly, we replicated the effect of mere agreeing on the willingness to cooperate in the setting of a market research telephone survey.

To the best of our knowledge, we are the first to show that ‘agreeing with someone’ eventuates in the assumption that this person resembles you. Next, as people often automatically respond to similar others in a manner that parallels their responding to friends or acquaintances (Burger et al., 2004), the increased perceived similarity with the interviewer may be sufficient to make interviewees more compliant. Finally, we suggest that the effect of

mere agreeing influences cooperative behavior as the result of a well-learned script that is mindlessly applied when meeting ‘similar’ people. This finding complements to the literature on influence processes that are more subtle, indirect, and unconscious (Cialdini & Goldstein, 2004). What is more, it contributes to a growing number of studies that find people typically responding to requests by relying on heuristic information processing (Chaiken & Trope, 1999).

### **1.6.2 Marketing implications**

We like to introduce ‘mere agreeing’ with propositions as a novel tool that subtly increases compliance with participation requests. In a telephone survey this increased cooperation can lead to subscribing as a panel member; in a personal selling context this cooperation might contribute to an increased likelihood of agreeing with the sales pitch.

As positive testing appears to be so pervasive and ‘natural’ in social interactions (Pandelaere et al., 2003), we stress the convenience of actually using positive testing in marketing interactions. Next, since a rather basal mechanism through similarity proved to be driving the effect, we can assume it to be a rather robust strategy. In fact, four consistent studies were able to show this robustness: The agreeing propositions worked equally well in a written (computerized) questionnaire among students, as in a real life telephone survey with respondents of all ages. Hence, we believe that this technique can be easily implemented in all circumstances and across different populations. Moreover, we sense that mere agreeing propositions are easy to assemble as they can question any opinion the respondents might have with respect to sports, politics, personality, lifestyle ... or even the weather.

From a social utility point of view, ‘mere agreeing’ may smooth the interaction between the interviewer and an interviewee. In everyday life, people rarely form impressions of others as an end in itself; accuracy is seldom their only goal. Tetlock (1992) for example reminds us that what looks like errors and biases from a strictly rational point of view is often adaptive from a pragmatic perspective. Presumably, interviewers (e.g., marketers) will try to show interviewees (e.g., respondents) that they understand them and sympathize with them. Moreover, when the context stresses the relevance of hypothesis-consistent testing (e.g., when interviewing a high-status interviewee), a preference for questions that match the hypothesis

is a manifestation of a social skill (Dardenne & Leyens, 1995). As the interview progresses, sufficient information about the personality is obtained and less concern for the smoothness of the interaction is needed. Hence, we propose that an interview has several goals, which may change over time. As interviewers choose fewer and fewer matching questions as the interview progresses (Leyens et al., 1998), we might predict that the applicability of mere agreeing propositions can be particularly important in the beginning of an interview (e.g., telephone survey) or personal selling context.

One question for future research concerns the scope of the effect. It is possible that the more interviewees 'learn' about an interviewer, for instance through visual appearance in a face-to-face interview, the less likely it is that mere agreeing will enhance their willingness to help the interviewer afterwards. First, interviewees' perceived similarity with the interviewer might then be based upon the actual perception they have with respect to the interviewer's personality and looks, rather than upon the projection bias (e.g., Cronbach, 1955) and the extent of prior agreement. Second, the more (visual) contact between respondents and interviewer, the more likely respondents are to infer that the interviewer has an evidentiary basis for his/her positive questions (Swann, Giuliano, & Wegner, 1982). Both predictions assume that the more respondents are 'familiar' with the interviewer, the less likely it is that prior agreement will lead to the assumption of attitude resemblance and thus, the less likely it is that prior agreement will lead to increased cooperation with the interviewer.

Besides, as consumers' persuasion knowledge is easily activated (Friestad & Wright, 1994), we should carefully watch over the 'subtlety' of this technique. Specifically, since the increased compliance that we demonstrated in the studies presented here, is the result of heuristic processing, any condition that triggers more systematic processing may reduce or eliminate the effect. Salient cues in the situation often can force us into a more thoughtful consideration of information (Macrae & Johnston, 1998). One possibility is the size of the request (Pollock, Smith, Knowles, & Bruce, 1998); that is, a request implying a large 'effort' or a high price might cause individuals to think about the request and the implications of saying 'yes' and thereby pull them into thoughtful processing. Next, under some circumstances the mere agreeing strategy might be too 'obvious' for respondents. For example, increasing the number of agreeing propositions (e.g., from 8 to 15), or using a very friendly or pushy interviewer to begin with, might cause participants to detect the 'mere agreeing' technique, which then gives them the opportunity to (over)correct for the influence.



Just as the debiasing study illustrates, the more respondents become aware of the extraneous influence, the more the influence of mere agreeing on compliance should be attenuated.

Finally, further research is needed to investigate how many agreeing propositions are exactly needed for the effect to occur, and whether the relation is curvilinear (decreasing marginal effects).

## GENERAL DISCUSSION

In three different manuscripts we showed that compliance with a donation request or a request for help is (at least partly) the result of heuristic processing and that subtle cues (either internal or external) can be applied to affect consumers' likelihood of making a 'cooperative' choice.

In the first manuscript, we found support for the idea that adding exchange to charity can provide potential donors with an *anchor* or expected donation amount. People reacted positively to donation requests that were framed as the sale of a product, if the product signaled a low anchor amount, a 'fair' price. In a simple donation setting, on the other hand, people lacked a reference price. In their attempt to estimate a socially acceptable donation amount, many overestimated the cost of giving and thus decided not to donate. With respect to our contribution to the field of social marketing, charitable organizations may improve their door-to-door soliciting strategies by offering their potential donors *a reference price*. Crucial in the marketing of fundraising is, apparently, to make the transaction as smooth as possible: We should provide potential donors with a *cue* of a comfortable expected donation amount and just 'name them a price'.

In the second paper, we propose that people's desire for money is a modern derivative of their evolved desire for food. Three studies demonstrate a symmetric association between the incentive value of food and money. An internal hunger *cue* in Study 1 and an olfactory food *cue* in Study 2, both increased participants' desire for money (i.e. decreased the willingness to donate). In Study 3, the desire for money (lottery fantasies) influenced the amount of candy consumed in a subsequent taste test. In marketing interactions, common intuition indeed suggests that hungry consumers are generally less cooperative. Hence, depending on the power and the goals of each party, we should be careful to negotiate on an empty stomach. In fact, hungry consumers might be less likely to agree with a sales pitch or, in the context of fund raising, less inclined to donate money. Our findings indeed imply that we should not ask people to donate before an upcoming meal or at the entrance of a nice smelling bakery.

In the final paper, we applied the social and interpersonal value of hypothesis-consistent testing (Dardenne & Leyens, 1995) to boost compliance rates in marketing interactions. More specifically, consistent findings across four studies demonstrated the applicability of mere agreeing propositions as a novel tool to increase compliance with subsequent requests for help. The increased compliance was proven to be caused by an increased perceived similarity between interviewer and interviewee (e.g., Burger et al., 2004). Further, we showed that ‘mere agreeing’ boosts compliance as the result of subtle and largely *heuristic processing*. Finally, we provided greater generalizability for the effect by replicating our lab findings in a sample of the general population in a market research telephone survey. In sum, we present marketers a *subtle* compliance increasing tool that has proven its robustness across different circumstances.

Overall, the three manuscripts suggest that cooperative behavior might be more driven by heuristic processing than many social marketers (e.g. Andreassen, 1995) might assume. Apparently, heuristic processing can lead to an increase in compliance when *subtle cues* such as a reference price (Manuscript I), an olfactory food cue (Manuscript II), or perceived similarity (Manuscript III), indicate that this is the type of donation amount we easily afford (Manuscript I), the kind of situation we should hold on to our money (Manuscript II), or the kind of person we usually say ‘yes’ to (Manuscript III).

Elaborating on these findings, it would be interesting to test whether the ‘prosocial’ option in our studies (e.g. donating money or helping the interviewer) represents the quick and easy, ‘automatic’ decision, whereas refusing to help may be the option that requires more cognitive resources. Van den Bos et al. (2006), however, found the exact opposite: people reacted in a more self-centered way to unfair arrangements when they had a lot on their minds. Their participants were more satisfied with advantageous inequity when cognitive processing was strongly, as opposed to weakly, limited. Van den Bos et al. (2006) argued that when reacting to arrangements of advantageous inequity, judging the advantage is quick and easy as preferences are primary, whereas adjusting this appraisal requires cognitive resources as it entails integrating fairness concerns with the initial preference appraisal. Related to our studies, further research is needed to explore whether participants’ primary preference is to comply with a request or not to comply. Additionally, we should investigate whether this

primary preference is moderated by participants' social value orientation<sup>7</sup>. After all, it seems reasonable to assume that the primary choice of proselves differs from the primary choice of prosocials. If that is the case, than social value orientation might function as a moderator in all our findings.

In the remainder of this chapter, we identify some more suggestions for future research, which, to come full circle, we will categorize according to Fine's 7P's marketing model (1990) as described earlier in the introduction.

### **Future Research I: Adding Exchange to Charity**

*Placement.* An opportunity for future research is to test the reference price explanation outside the lab setting. It is important to assess the validity of our findings in a real life donation setting. Furthermore, it would interesting to test whether priced donation requests, compared to simple donation requests, can also improve response rates in a direct mail context. For example, although legitimizing small contributions significantly increased the number of donations in a door-to-door charity drive (Cialdini & Schroeder, 1976), this technique failed to boost compliance rates in a direct mail fund-raising (DeJong & Oopik, 1992). In addition, we already noted that the size of the reference anchor points may change over time due to inflation.

*Purchasers.* More research is also needed to validate our findings in a population other than college students. For instance, the size of the anchor is likely to be consumer dependent (e.g., dependent on income: students vs. business men). In fact, we suggest that it might be worthwhile for charities to 'know' their targets and to segment the donor database according to consumer dependent anchor points. Additionally, the charity might decide to cut or raise donation prices depending on the organization's marketing strategy, for example reaching a critical mass of 'small' donors or only a select group of 'large' donors.

*Producer.* The size of the 'fair' reference price, which still lies within the range of acceptance, might of course also be dependent on the particular charity. We used rather major

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<sup>7</sup> Social Value Orientation is a dispositional variable defined as a particular preference for various own-other distributions (McClintock, 1972).

and well-known charities. Further research is needed to investigate whether Sinha and Batra's finding (1999) that consumers are more price conscious when they perceive price unfairness by national brands (which results in private label purchases), also holds for charities. If consumers are also more price conscious when they perceive price unfairness by national charities, well-known national charities would have to pay extra attention when determining their token prices. Moreover, local charities (e.g., local basketball team) then may even have a competitive advantage of using 'higher' prices before being perceived as 'unfair'.

*Product.* It is possible that framing the donation as the sale of a charity related token (e.g., a bumper sticker of the Red Cross) would generate different results. The donor, for instance, might use a charity related token to 'signal' his social responsibility. Contrary to our findings, in this case, a high priced exchange might yield better compliance rates than a high priced mere donation. After all, if offering a product in exchange for a donation activates self-serving motivations and thoughts about the usefulness of the product (Van Dijk, 2003), consumers might actually perceive the bumper sticker as an object with a high self-presentation utility value for which they might be willing to pay a high price. In fact, it would be interesting to test Van Dijk's (2003) proposition directly. For instance, a lexical decision<sup>8</sup> task might reveal that framing the donation request as the sale of a product compared to simply asking people to donate, (1) activates more self-serving motivations and economic thoughts about the usefulness of the product, and/or (2) triggers less social equity concerns. In addition, further research may try to uncover how individuals' social value orientation<sup>9</sup> might moderate the activation of economic versus social equity concerns in both conditions (simple donation versus exchange). After all, in general, one might expect the activation of economic thought to be higher for pro-selfs than pro-socials and vice versa for the activation of social equity concerns.

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<sup>8</sup> A lexical decision task is a type of experiment in which subjects are presented, either visually or auditory, with a mixture of words and pseudowords. Their task is to indicate, usually with a button-press, whether the presented stimulus is a word or not. The analysis is based on the reaction times for the various conditions (e.g., mere donation or exchange) for which the words (or the pseudowords) differ (e.g., related to self-interest or social equity). One can draw theoretical inferences from differences like this. For instance, we might conclude that words related to social equity have a stronger mental activation in the mere donation condition than in the exchange condition.

*Promotion.* Finally, in our studies, participants' donation decisions were influenced by an informative anchor (i.e. the reference price) and participants were probed to consider the anchor as a possible donation value. Future research could explore whether similar findings can be obtained by means of 'basic anchoring'. Basic anchoring is the situation in which people's judgments of a target are influenced by an irrelevant numerical anchor (e.g., a number generated by a wheel of fortune) and where people are not asked to consider the anchor as a possible target value (cf. Wilson, Houston, Etling & Brekke, 1996). Suppose, for example, that consumers before answering the donation request would be presented with an advertisement for a beer, of which the price happens to be €1.50. Would this unrelated and irrelevant small numerical anchor induce them to donate? Feinberg (1986), for example, found more people donating a larger amount when a credit card donation option (i.e. a 'spending' cue) was present.

### **Future Research II: Hungry for Money**

*Purchasers (1).* A first limitation of this research is that we did not control for factors that could influence the food/money relationship, such as BMI (Body Mass Index), or financial status of the participants. Nevertheless, we believe that our consistent finding across three studies, even without controlling for BMI, suggests that the effect is rather robust. Note that our manipulations were subtle in comparison with rather stable characteristics such as income and BMI. We are aware of the fact that BMI might play a role in the effect of hunger on 'desire for money' and vice versa. For instance, Nisbett and Kanouse (1969) found that food deprivation differently affected obese and nonobese shoppers (see also Steinberg and Yalch 1978). Normal weight shoppers tended to purchase more when deprived than overweight shoppers. Perhaps, obese individuals are not that sensitive to internal hunger cues as nonobese individuals, because they possess more caloric resources. Considering our findings, we might predict the absence (or a smaller) of a hunger effect on the donation behavior of obese individuals. Further research is needed to address this question.

*Purchasers (2).* According to Steinberg and Yalch (1978), free food sampling in a supermarket differently affected the subsequent purchases of obese and nonobese shoppers: After consumption of the food sample, the obese purchased more additional products than the nonobese. Hence, whereas Nisbett and Kanouse (1969) found obese shoppers to be less

sensitive to internal hunger cues than nonobese shoppers, Steinberg and Yach (1978) found obese shoppers to be more sensitive to the taste of food in a sample. To link Steinberg and Yach's findings to our research on hunger and money, it would be interesting to investigate whether internal hunger cues on the one hand, and taste or olfactory food cues on the other hand, would affect the donation behavior of obese versus nonobese consumers differently. If obese individuals are less sensitive to internal food cues than nonobese individuals, we would expect hungry obese individuals to donate more money than hungry nonobese individuals (see *supra*). On the contrary, if the obese are more sensitive to taste or olfactory food cues than the nonobese, we would expect obese individuals to donate less money than nonobese individuals in a room that is scented with the smell of freshly baked brownies.

*Purchasers (3)*. In an exploratory study, we found that the effect of hunger on desire for money was moderated by intelligence (i.e. IQ). The effect of hunger on donation behavior was smaller for 'high' intelligent students than for 'low' intelligent students. There may be several possible explanations for why 'high' intelligent people are less sensitive to internal cues of hunger than 'low' intelligent people. First, 'high' intelligent hungry individuals might know that they are capable of collecting enough resources in the future; whereas 'low' intelligent hungry individuals might remain uncertain as to how many resources they can gather and as a consequence not eager to donate to charity. Second, in the light of market signaling of personal characteristics, 'high' intelligent hungry people might donate more money than 'low' intelligent hungry people out of self-presentation concerns. For example, the costly signaling theory states that individuals with a certain quality (such as high IQ) can signal their type by displaying unconditional altruism, like sharing money or food. Since the community members can learn that that individual is good for mating, or better avoided in competition, the altruistic individual is likely to be reimbursed with increased fitness during his or her lifetime (e.g., Gurven, 2002). More research is needed to explore the possible predictions.

### **Future Research III: Better Think before Agreeing Twice**

*Price*. One question for future research concerns potential limits to the effect of mere agreeing on subsequent cooperation. Since the increased compliance we demonstrated in the manuscript, is the result of mindless processing, any condition that prompts more systematic

processing may reduce or eliminate the effect. For instance, salient cues in the specific context often can force us into a more mindful consideration of information (Macrae & Johnston, 1998). One possibility is the size of the request (Pollock, Smith, Knowles, & Bruce, 1998); that is, a high 'price' might cause individuals to think about the request and the implications of saying 'yes' and thereby pull them into thoughtful processing. For example, asking respondents to participate in a weekly questionnaire might be too large a request, and thus, may activate mindful processing or 'debias' the effect as such.

*Placement (1).* For the same reasons as mentioned above, we should carefully examine the subtlety of the mere agreeing tool. The 'mindless' nature of the effect, implies that the more respondents become aware of this extraneous influence, the more the influence of mere agreeing on cooperation should be attenuated. Consumers' persuasion knowledge is expected to 'hover in readiness' to help in the formation of valid attitudes about an influence agent (Friestad & Wright, 1994, p. 10) and consumers use this knowledge to manage the persuasion attempt in achieving their own goals. So, we should avoid that mere agreement tool gets perceived as an overt persuasion attempt. For instance, one can imagine that the context of a door-to-door sales pitch or a trade fair automatically makes people highly sensitive for persuasion attempts, and thus, 'rings a bell' when they tend to agree on almost everything the (pushy) vendor puts forward. Further research is needed to address this question.

*Placement (2).* Further research is also needed to explore how the setting of the interview can affect the outcome of using mere agreement. As mentioned earlier, it is possible that the more interviewees 'learn' about an interviewer, for instance through visual appearance in a face-to-face interview, the less likely it is that mere agreeing will enhance their willingness to help the interviewer afterwards. First, interviewees' perceived similarity with the interviewer might then be based upon the actual perception they have with respect to the interviewer's personality and looks, rather than to be driven by projection bias (e.g., Cronbach, 1955) and the extent of prior agreement. Second, the more (visual) contact between respondents and interviewer, the more likely respondents are to infer that the interviewer has an evidentiary basis for his/her positive questions (Swann, Giuliano, & Wegner 1982). Both predictions assume that the more respondents are 'familiar' with the interviewer, the less likely it is that prior agreement will lead to the assumption of attitude resemblance and thus, the less likely it is that prior agreement will lead to increased cooperation with the interviewer. Further research is needed to address these questions.



*Promotion.* Finally, another avenue for future research would be to examine an even more abstract and basal way of ‘agreeing’, that is ‘nodding’. More specifically, it would be interesting to test whether overt vertical head movements towards an unknown other might increase subsequent cooperative behavior with this person. Head nodding, in comparison to head shaking, has already been shown to elicit positive reactions to persuasion attempts (Wells & Petty, 1980). Briñol and Petty (2003) explain these findings by means of a self-validation analysis that postulates that head movements either enhance (nodding) or undermine (shaking) confidence in one’s pre-existing thoughts about the message. However, other research (e.g., Priester, Cacioppo, & Petty, 1996; Tom et al., 1991) has proven that vertical head movements also facilitate the production of favorable thoughts and feelings towards *neutral stimuli*. For this reason, it makes sense to assume that vertical head movements in the presence of an *unknown other* may evoke positive feelings towards this individual and thus, might also increase the willingness to help this other person afterwards.

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